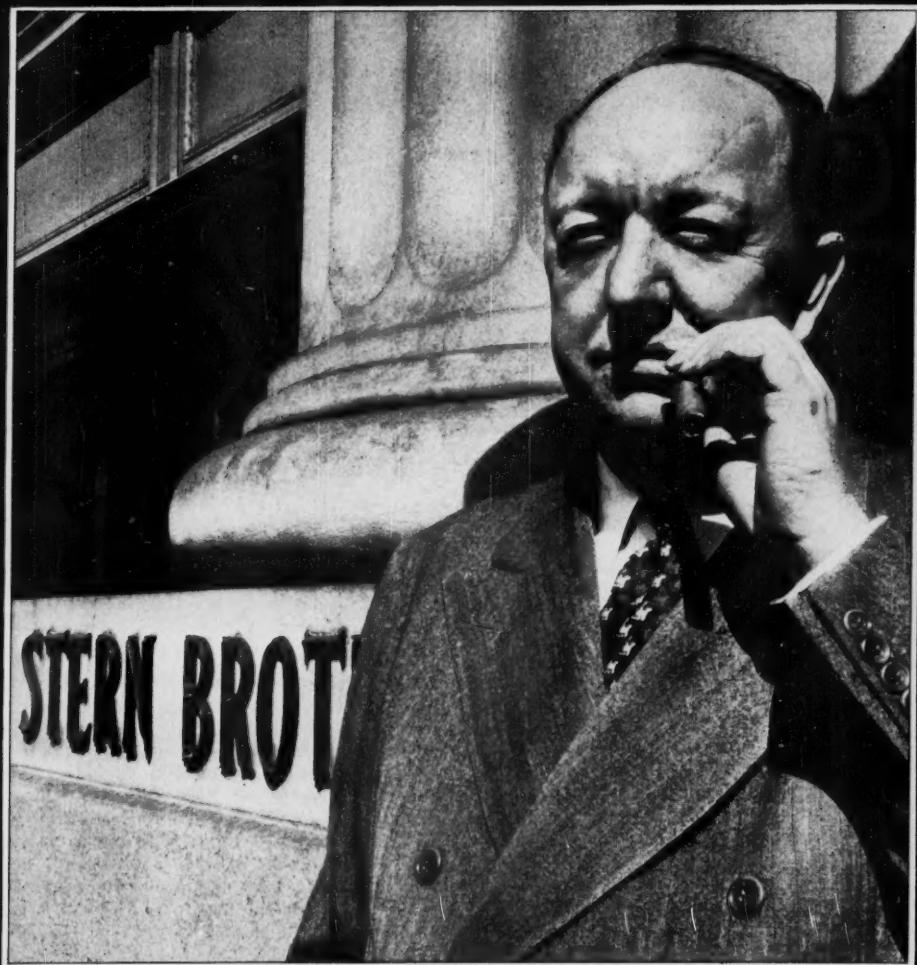


BUSINESS WEEK

INDUSTRY IS GOING
Hog Wild
ON EXPANSION

SPECIAL REPORT, PAGE 67

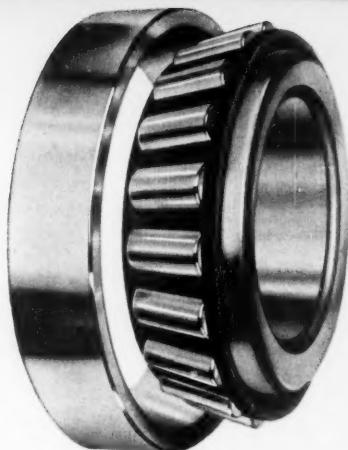


Allied's Puckett: Biggest Department-Store Chain Reaches for Manhattan (Page 78)

A MCGRAW HILL PUBLICATION

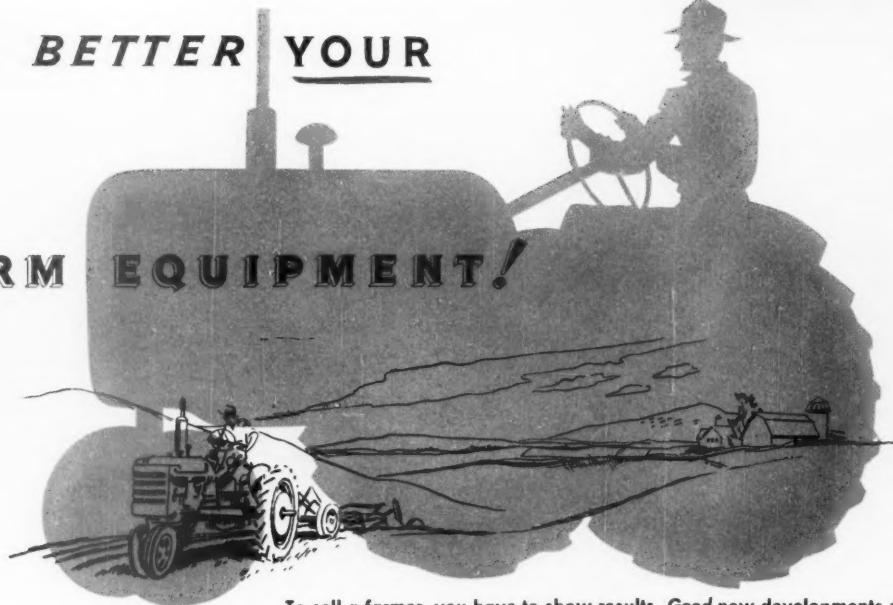
MAR. 31, 1951

THE BETTER THE
BEARINGS



THE BETTER YOUR

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To sell a farmer, you have to show results. Good new developments meet a hearty welcome in the farm equipment field. One important fact remains unchanged. You can't engineer your way around the need for sound, dependable bearings. ★ Progressive farm machine manufacturers know it. And they know that Bower Spher-O-Honed bearings give their products all that's best in modern roller bearing design and construction. New developments? Bower bearings combine a whole family of basic engineering refinements—and manufacturing advances, too—that mean greater accuracy, less initial wear, better lubrication, and longer bearing life. ★ Whether you produce farm equipment—or anything from motor cars to rolling mills—you'll build a better product with Bower Spher-O-Honed bearings. Better get the full facts today.

BOWER ROLLER BEARING COMPANY • Detroit 14, Michigan

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For years every ounce of rubber was gathered by natives from millions of tropical rubber trees. But now—thanks to amazing scientific progress—synthetic plants occupying a few city blocks produce as much rubber as thousands of tropical acres!

Even more wonderful, from the giant spheres of these plants come *new and different kinds* of rubber for improved products.

Synthetic and natural rubber is used to make 50,000 different products . . . from surgeons' gloves to shock absorbers.

The rubber industry is hard at work developing new products. Thousands of homes will be heated electrically by concealed radiant panels of rubber . . . rubberized streets for longer wear and greater safety are being tested. Some in the industry even foresee a day when automobile tires will last as long as the car on which they are delivered!

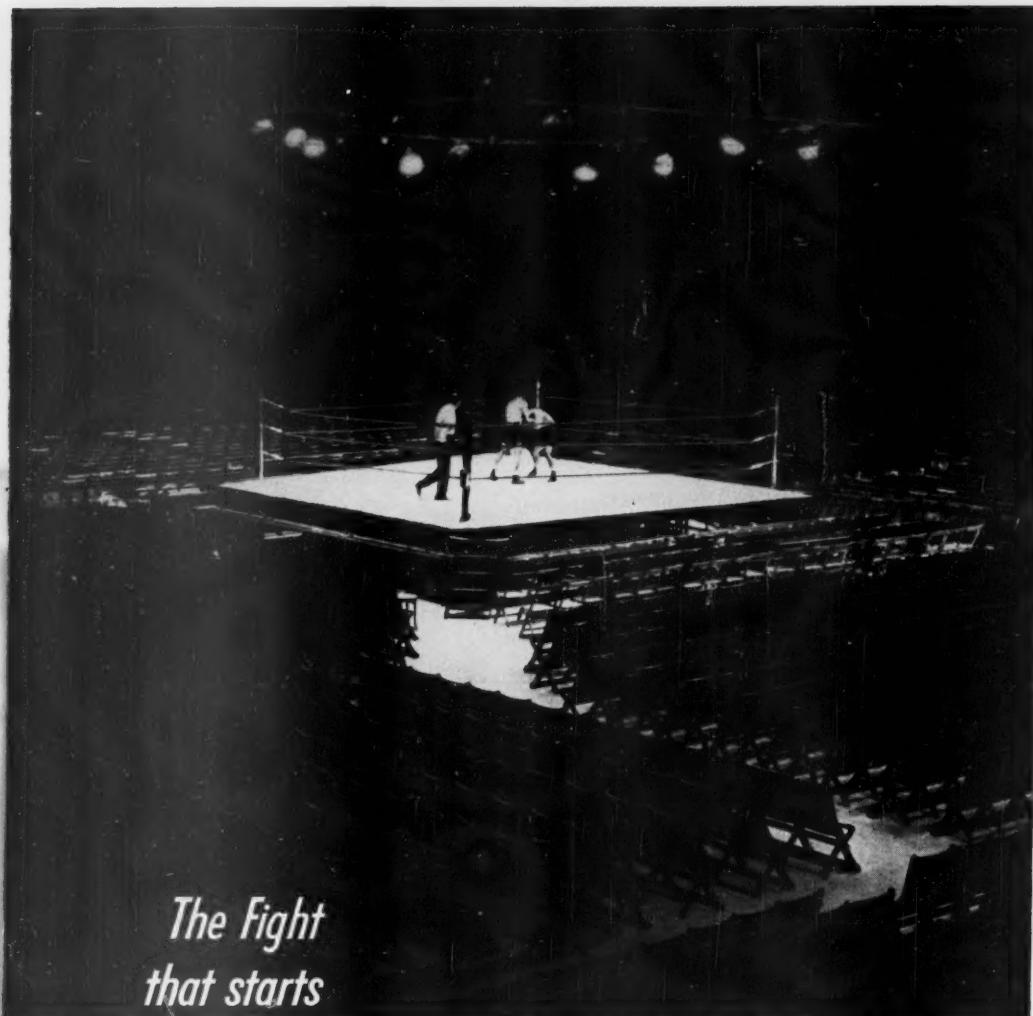
The rubber industry's unceasing search for new and better products, at lower costs, is typical of progressive American industry.

In today's uncertain times the strength and character of the American people, backed by the great resources of our competitive business system, are the hope of all people who cherish freedom.

BANKERS TRUST COMPANY
NEW YORK

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that starts
when the crowd
goes home*

For one man, the fight just begins when the last punch is landed at Madison Square Garden.

His fight, however, is against time.

He rushes the film of that last Friday bout to the laboratory, and adds it to films made all week at the famous arena. The result: an exciting film program called: "This Week at Madison Square Garden."

And in just a few days, television viewers all over the country are cheering the thrilling events!

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Air Express speed gives him time to edit and process his films, and get them safely and cheaply to stations everywhere.

And the same speed that meets TV deadlines can help production deadlines, too! Whether your business is films or factories, here are the unique advantages you can enjoy with regular use of Air Express!

IT'S FASTEST—Air Express gives the fastest, most complete door-to-door pick up and delivery service in all cities and principal towns, *at no extra cost*.

IT'S MORE CONVENIENT—One call to Air Express Division of the Railway Express Agency, arranges everything.

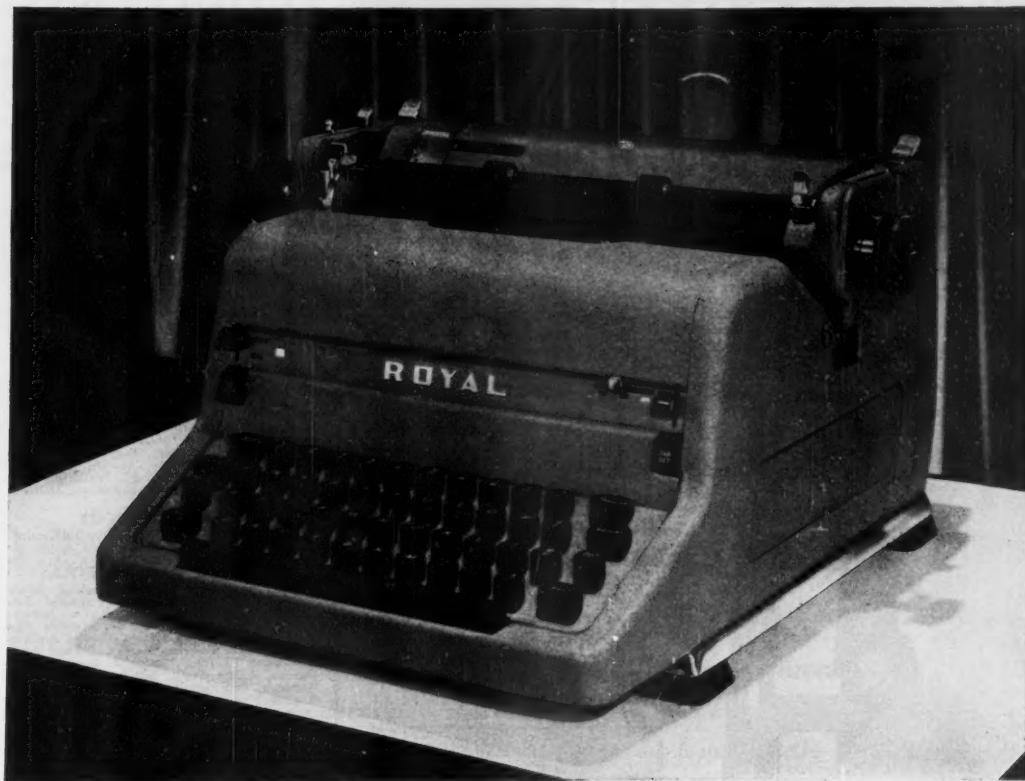
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 **AIR EXPRESS**
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Learn how the Royal Electric can cut office costs!

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Increase stencil production . . .

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Look into the cost-cutting possibilities of the Royal Electric. It is the long-preferred Royal Standard with power added.

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P.S. With secretarial and typing help getting scarce, alert management will want to keep morale and job satisfaction high. Royal Electric relieves tension, greatly lessens fatigue.

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Made by the World's Largest Manufacturer of Typewriters

**FOR FULL DETAILS,
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WITH
72" OVERALL
HEIGHT



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Fork Lift Truck Easily Enters
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Doors... Yet Tiers 3 Pallets High!

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Tier-Masters in your operation will save you time and money. . . . Let a MOBILIFT consultant give you all the cost-slashing facts!



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MODEL "E" TIER-MASTER: 2,000 lb. cap. with 72" Mast (Free Lift: 47"; Mast Ht. extended: 142") outside turning radius: 57".

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There's only one like this...



Don't be confused about the many companies with the word "Electric" in their names. Just as no two thumbprints are alike, no other "Electric" company is like *Western Electric*.

We don't make toasters, refrigerators, television sets and so on. Western Electric is the manufacturing unit of the Bell Telephone System—has been since 1882. Our regular job is making telephone equipment—*good* equipment—to help the Bell System give America dependable telephone service.

The specialized experience we gain in doing our regular job is put to work as called for in producing communications and electronic equipment needed by the Armed Forces to keep our country safe. In the present national emergency we are hard at work increasing this effort . . . *Western Electric Company*.

Compactness, Low Weight
for Your Product...

One of 6 Advantages of

Lamb Electric

special application MOTORS

Our 35 years' experience in designing motors for minimum weight and space factor frequently enables us to reduce product weight, yet maintain optimum performance, and lower cost.

These are among the advantages of using Lamb Electric Motors. Designed to meet the exact requirements of your application, they provide:

IN THE MOTOR...

1. Reduced cost, weight, space.
2. Exact mechanical and electrical requirements.
3. Thorough dependability.

IN THE PRODUCT...

4. Better performance.
5. Improved eye-appeal.
6. Compactness, less weight.

Our engineering department will be glad to work with yours in obtaining these benefits.

The Lamb Electric Company, Kent, Ohio

Series universal motor parts for portable tools, portable business machines and many types of household appliances.

Series universal motor with integral gear reduction...can be readily applied to devices requiring a slow speed motor drive.

Helical geared fuel transfer pump motor having maximum output with minimum weight. For aircraft, but adaptable to other uses.

THEY'RE TEAMING UP WITH AMERICA'S *Fine* PRODUCTS

Lamb Electric
SPECIAL APPLICATION
FRACTIONAL HORSEPOWER **MOTORS**

Highlights In This Issue

Easter Sales Falter

- Is this the spring dip everyone has been talking about? P. 19

New Gasoline

- You're going to be hearing a lot about boron gas. It lets you get by on lower octane. P. 20

Price Battle

- A lot of manufacturers insist the pending price regulation will drive them out of business. But OPS doesn't think it will. P. 25

How to Cut Your Taxes

- The procedures on which you pay dividends, borrow money, buy goods make a lot of difference in your excess profits tax. P. 64

The Van Sweringen Dream

- Now Robert Young seems to be making another try at putting together a transcontinental railroad. P. 88

CMP at Last

- This is the week Washington has to make up its mind on the Controlled Materials Plan. P. 98

The Week's Orders

- A new feature—a complete listing of price and material regulations coming out of Washington this week. P. 104

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HOW NYLON'S STRETCH HELPS A SHOE IN A SQUEEZE

When a boy squeezes his foot into a shoe this way, the thread in the back seam needs more than just strength to stand the strain. The strength plus elasticity that nylon thread supplies is another example of nylon's useful combination of properties.

Nylon thread stretches just enough to absorb the stress and strain a boy's shoes have to stand—keeps shoe uppers from pulling apart. And nylon's resistance to rot when shoes get wet enables the thread to stay strong and elastic throughout the life of the shoe. That's why a shoe manufacturer using nylon thread could give a four-month guarantee with each pair of boy's shoes.

Nylon thread pays off when the shoes are sewed, too. Ordinary thread breaks several times a day. Smooth, uniform ny-

lon thread runs through the machine easily—the operators sew for days without a break. Less time is lost for rethreading... more shoes are produced.

These, or other nylon properties may be applicable to your business. Perhaps you can use nylon to improve your product or increase the efficiency of production methods... even make a new product.

In addition to its strength and resiliency, nylon is tough and durable, has high abrasion resistance. It resists deterioration by petroleum oils, soil rot, alkalies, mold and

mildew. And nylon fabrics can be heat-set to hold shape.

NEW BOOKLET: "Nylon Textile Fibers in Industry," contains 23 case histories, brings businessmen up-to-date on nylon's performance in industry. Write for your copy. And tell us your fabric or fiber problems. Address Nylon Division 103, E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Delaware.



**BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY**

DU PONT NYLON FIBERS

Although demand for nylon still exceeds supply, you may wish to evaluate its possible future applications in your own business. Note: Du Pont makes only the fiber—not the nylon fabric or finished products.

For nylon... for rayon... for fibers to come... look to Du Pont

3

METALS THAT WORK MIRACLES

Available for your defense and essential jobs

CARBOLOY PERMANENT MAGNETS

(Alnico and other types)

Permanent magnets are essential for radar, aircraft generators, magnetos and auxiliary power units. Uniform high quality Carboloy permanent magnets are also an important component part of compasses, meters, control equipment, communication equipment and countless other defense and essential products.



CARBOLOY CEMENTED CARBIDES

In World War II, carbide tools and dies were of vital importance for practically all metal working applications. For example, all shells were machined with carbide tools, requiring only 1/16 as many men as in World War I. Today even greater productivity can be achieved because of outstanding post-war advances in cemented carbide and new machine tools designed for the higher speeds possible with carbides.



CARBOLOY HEAVY METAL

(Hovimet type)

When a metal was needed that provided maximum weight in minimum size with adequate strength for rotor shells in gyroscopes used for flight control and tank stabilizers, manufacturers chose Carboloy hovimet. In addition to these mechanical uses, this versatile metal is also employed as a high-density material for screening radioactive radiation. Available for defense use only.

Improve products, increase output with these three vital metals manufactured by Carboloy Company, Inc.

Carboloy Company's engineering and metallurgical skill, large manufacturing facilities and rigid quality controls assure you uniform

high quality metals for defense and essential production.

Write for further information about these three metals that work miracles. Carboloy Company, Inc., A General Electric Affiliate, 11183 E. 8 Mile Road, Detroit 32, Michigan.

The name "Carboloy" denotes manufacture by Carboloy Company, Inc.

Industry
looks to

CARBOLOY for versatile
THE QUALITY BRAND metals

BUSINESS OUTLOOK

BUSINESS WEEK
MARCH 31, 1951



That inventory recession, if there's going to be one, is on now.

And if it's here, there are two simple reasons: (1) Manufacturers turned out more than anybody ever thought they could, and (2) consumers have bought the stuff, hand over fist, until they are sated—or broke.

Here's your business picture, in broad brush strokes, as of now:

Government spending will increase steadily throughout this year.

Business spending on new plant and equipment will mount (page 67)— but spending on inventory is past its peak.

Consumer spending, temporarily, is down. But demand will recover.

Lower business spending on inventory and reduced consumer demand ordinarily would spell a fairly sharp recession.

Today, however, it can mean no more than a leveling or a slight dip.

The reason is easy to see. Government spending is out of all proportion to anything that might be considered normal. This will pump up consumer income—before taxes—and bring a resumption of consumer buying.

Reduced consumer buying and scattered price cuts are taking the enthusiasm out of Washington's anti-inflation drive.

Thus this week's ceilings on retail food prices please no one; nothing less than rollbacks will satisfy the housewife, while new irritations and puzzlement are heaped on businessmen.

Similarly, military successes are blunting the production drive.

Just when materials are coming to the desperately tight stage, Washington backs away from a Controlled Materials Plan (page 15). This in the face of an Iron Age statement that 50% of two mills' steel now is scheduled for military programs or civilian output tagged "defense essential."

Congress, in present circumstances, isn't going to vote any \$8-billion or \$10-billion of additional arms spending. But, as strategy, such a request might avert cuts in present appropriations.

Income Tax Day was much less deflationary than had been expected.

Everyone knew that the high 1950 incomes would mean huge payments this year. That spelled for the Treasury a very large, if temporary, excess of cash income over outgo.

In fact, the fiscal year's cash surplus up to Mar. 22 topped \$4-billion.

Such a surplus is supposed to be deflationary. Besides, it came at a time when we were expected to have "conversion unemployment."

For all that, the general level of business is very satisfactory (page 13).

Steel output this week not only is at a new record, but it exceeds rated capacity by the largest margin since the war.

The mills scheduled production at 2,069,000 tons for the week.

That represents an operating rate of 103½%. The previous week, at 101.1% of capacity, should have accounted for 2,025,000 tons.

Here's a sidelight on demand for steel products: Fabricators of structural steel shipped 331,645 tons in the first two months of the year—but

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
MARCH 31, 1951

booked new orders for 486,966 tons. The order backlog tops 2-million tons, the American Institute of Steel Construction reports.

One factor in the setup in machine tool orders (February's index number of 615.8 was the highest since the World War II peak) is the rapidly rising tide of government business.

General Services Administrator Jess Larson says Uncle Sam now has contracted for \$63,177,019 worth of machine tools.

These orders have been distributed among 13 manufacturers.

Freight loadings on the Atlantic Coast are expected to be 5½% ahead of last year in the second quarter. That's the view of the Atlantic States Shippers Advisory Board.

Of 59 types of freight, higher shipments are forecast for 45.

Among the significant gains are 31% for electrical equipment, 21% for lumber and other forest products, 22% for furniture, 15% for textiles, and 11% for iron and steel.

Akron, already afflicted by employment, will feel the cut of 25% in tires for new cars (page 26). But any idea that the order was going to squeeze auto output severely went by the boards this week.

The auto makers have their answer: Ship cars with only four tires.

On the face of it, this should save rubber according to the government's plan. But it won't. The buyer of a new car will, of course, scurry around until he finds someone to sell him a spare.

That, in fact, will pinch the replacement supply tighter than ever.

Here are a couple of companies that don't see much of a bump in converting from civilian output to arms.

Rheem Manufacturing believes its appliance lines will dip 25% in the second quarter. But it already has military work to fill the gap.

Sprague Electric says demand for its products is down along with the dip in television output. But government orders are expected by the company to send 1951 dollar volume above last year's.

Signs of a decline in home building crop up in Chicago and Detroit.

It now looks as though March starts in the Windy City will run about 2,000 against 2,700 last year; the decline in Detroit may be 40% to 50%.

Manufacturing employment will pass the 16-million mark this summer—if, indeed, it hasn't already done so.

As far back as February, the total reached 15.9-million. That's about 1.9-million higher than a year earlier.

Most of the rise so far has been in hard-goods plants.

Aircraft has scored the largest gain among defense industries.

Charges of labor pirating are being heard in most metalworking cities.

But in many cases it isn't really pirating. Auto companies have put much of their defense business in cities other than Detroit. They pay the auto workers' wage scale. That tops most other wages—and draws workers.

Industries with lower scales can't compete.



Tank Cars . . .

... or Turbines

... no matter what your equipment requirements, you know that hard-to-get metals are making them difficult to fill.

But, whether it's transportation, power or process equipment . . . a progressive equipment builder can often overcome limitations of time, men and materials. He can recondition old equipment for greater efficiency, or build new, more productive units, saving you money and making most effective use of strategic materials.

Today, such equipment builders achieve these results through Lukenomics. For this principle combines their experience, and that of designers and engineers, with Lukens' specialized knowledge of materials and their application. For names of these equipment builders, write, stating your problem, to Manager, Marketing Service, Lukens Steel Company, 483 Lukens Building, Coatesville, Pa.

With the defense program's having first call, you'll understand why Lukens specialty steel products for civilian use are not so plentiful as in normal times.

OVER 140 YEARS' EXPERIENCE AS THE WORLD'S LEADING PRODUCER OF SPECIALTY STEEL PRODUCTS

STEEL PLATE

CLAD STEELS

HEADS

STEEL PLATE SHAPES





when you deal with electricity . . .

HOW SAFE CAN YOUR PRODUCT BE?

to make it safer; make it with MELMAC[®] plastics

Electrical components molded of MELMAC have an outstanding record of industrial, home and military service. Here's why:

Exceptional arc-resistance and non-tracking properties minimize hazards from short-circuiting and fire.

High resistance to carbonizing under arcing, wet or dry; high dielectric strength at normal or elevated temperatures.

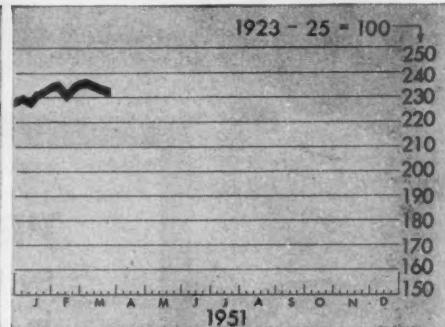
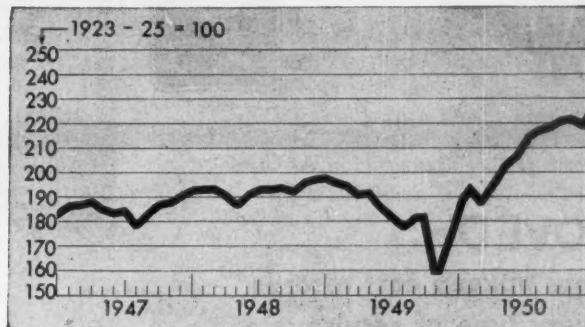
Excellent dimensional stability and resistance to cracking.

On their record, MELMAC plastics are "ready and able" to help make your product safer . . . for defense, for industry or for the home. Consult any experienced, well-equipped molder. We'll be glad to help you find one.



In Canada: North American Cyanamid Limited, Royal Bank Building, Toronto, Ontario, Canada.

FIGURES OF THE WEEK



Business Week Index (above)

PRODUCTION

	Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
Steel ingot production (thousands of tons)	2,069	2,021	1,995	1,843	1,593
Production of automobiles and trucks	176,390	+182,781	199,267	140,196	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$43,932	\$43,112	\$60,350	\$35,834	\$19,433
Electric power output (million kilowatt-hours)	6,848	6,903	6,833	5,993	3,130
Crude oil and condensate (daily average, 1,000 bbls.)	6,038	6,043	5,945	4,848	3,842
Bituminous coal (daily average, 1,000 tons)	1,645	+1,670	1,781	2,279	1,685

TRADE

	Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
Miscellaneous and l.c.l. carloadings (daily average, 1,000 cars)	79	80	76	70	86
All other carloadings (daily average, 1,000 cars)	45	45	47	51	52
Money in circulation (millions)	\$27,121	\$27,167	\$27,164	\$26,972	\$9,613
Department store sales (change from same week of preceding year)	+11%	+20%	+18%	+1%	+17%
Business failures (Dun & Bradstreet, number)	170	185	127	186	228

PRICES (Average for the week)

Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100)	527.0	523.5	528.6	356.4	198.1
Industrial raw materials, daily index (U. S. BLS, Aug., 1939 = 100)	368.6	\$369.4	379.2	219.4	138.5
Domestic farm products, daily index (U. S. BLS, Aug., 1939 = 100)	411.7	411.1	414.4	305.1	146.6
Finished steel composite (Iron Age, lb.)	4.131¢	4.131¢	4.131¢	3.837¢	2.396¢
Scrap steel composite (Iron Age, ton)	\$43.00	\$43.00	\$43.00	\$28.42	\$19.48
Copper (electrolytic, Connecticut Valley, lb.)	24,500¢	24,500¢	24,500¢	18,500¢	12,022¢
Wheat (No. 2, hard winter, Kansas City, bu.)	\$2.39	\$2.40	\$2.45	\$2.28	\$0.99
Sugar, daily price (raw, delivered New York, lb.)	5.85¢	5.87¢	5.96¢	5.53¢	3.38¢
Cotton, daily price (middling, ten designated markets, lb.)	45.14¢	45.14¢	#	31.82¢	13.94¢
Wool tops (Boston, lb.)	\$4.70	\$4.70	\$4.45	\$2.11	\$1.41
Rubber, daily price (ribbed smoked sheets, New York, lb.)	74.50¢	70.00¢	75.00¢	20.00¢	22.16¢

FINANCE

90 stocks, price index (Standard & Poor's Corp.)	170.7	171.2	173.7	139.2	78.0
Medium grade corporate bond yield (Baa issues, Moody's)	3.25%	3.25%	3.16%	3.23%	4.33%
High grade corporate bond yield (Aaa issues, Moody's)	2.81%	2.80%	2.69%	2.59%	2.77%
Call loan renewal rate, N. Y. Stock Exchange (daily average)	2%	2%	1½-1¾%	1½-1¾%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	2-2½%	2-2½%	2%	1½-1¾%	1-1½%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks	50,321	51,826	50,491	46,468	†127,777
Total loans and investments, reporting member banks	70,447	69,538	69,231	67,006	†132,309
Commercial and agricultural loans, reporting member banks	19,173	18,956	18,588	13,843	†16,963
Securities loans, reporting member banks	2,205	2,072	2,124	2,024	†11,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks	31,198	30,782	30,900	36,702	†115,999
Other securities held, reporting member banks	6,562	6,583	6,454	5,518	†14,303
Excess reserves, all member banks	582	1,010	582	645	5,290
Total federal reserve credit outstanding	23,607	23,652	23,283	18,036	2,265

*Preliminary, week ended Mar. 24.

††Estimate (BW—Jul. 12 '47, p. 16).

##Markets closed.

‡Date for "Latest Week" on each series on request.

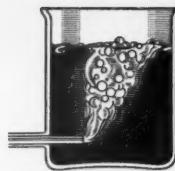
†Revised.



OIL



GAS



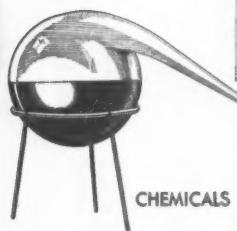
AIR



STEAM



WATER



CHEMICALS

PROVED—
by low upkeep cost records
in every type of service

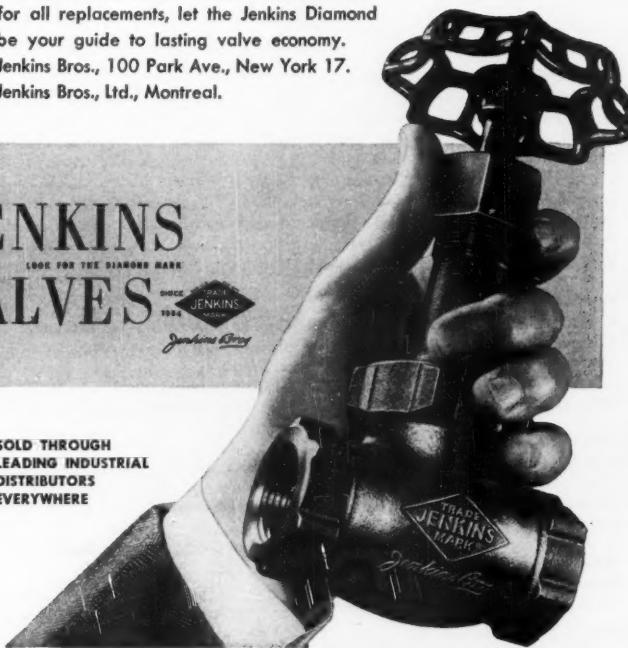
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— yet, despite this extra value, you pay no more for Jenkins Valves. For new installations . . . for all replacements, let the Jenkins Diamond be your guide to lasting valve economy.
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LEADING INDUSTRIAL
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EVERYWHERE



WASHINGTON OUTLOOK

WASHINGTON
BUREAU
MAR. 31, 1951



The letdown in Washington is reaching near-epidemic proportions.

Truman, tanned and bouncy after a Florida rest, isn't sure whether to be "tough" or "soft" in his future requests for changes in the various control laws.

• **Congress** is in a complaining mood about almost everything having to do with mobilization—about inflation, but also about price ceilings; about too much expansion, but also about shortages.

• **Mobilizer Wilson** is undecided whether to start a Controlled Materials Plan July 1—or ever (page 98).

• **Price chief DiSalle** is letting every last man involved have his say before ordering any more regulations (page 25).

• **Pentagon officials**—the civilians and the brass—are enjoying a quarrel over what the size of the 1952 military budget should be.

Urgency is playing second fiddle to wait-and-see. For weeks this has been coming on. Now it's evident that everybody is looking out for No. 1. And MacArthur's suggestion of a cease-fire order in Korea just compounded the Washington state of mind.

CMP is the best example you have of the letdown. Back in December, mobilization officials had already concluded that a tight system of scheduling metals for essential production was a must. Only question: Could they be prepared to put it into operation before the DO system fell apart? They thought July 1 would be a good target date.

Yet Wilson this week was wondering whether CMP is too drastic— regimenting industry more than the emergency now requires. This despite an all but unanimous agreement that the DO priority system is already falling short of filling military requirements, let alone supporting civilian programs. Businessmen everywhere are quipping they'd rather be an "old customer" than have a monopoly on all the DO's Washington passes out.

Defense Secretary Marshall acknowledges the letdown. He spoke out in a move to save the 18-year-old draft bill in Congress. He warned: Unless this pattern of blowing hot, then cold, on mobilization is broken, the whole effort to rearm will bog down.

Congress is the most lackadaisical of all. Except for a few crusaders, the members are busy peddling the problems of their constituents. The tax bill isn't anywhere near in shape for a vote. And this is how congressmen feel about various proposals for beefing up the control law:

Modifying the parity provisions governing food prices: dead set against. Rather, the farm bloc will demand that the cotton ceiling be lifted. It has already scared DiSalle out of controlling beef growers' prices.

Requiring nonmember banks to adhere to Federal Reserve legal reserve requirements: opposed.

Increasing reserve requirements for the Feds: maybe.

Restoring federal rent ceilings on dwellings: lukewarm.

Stopping cost-of-living wage hikes: opposed.

Effects of the current letdown won't be felt right away. Enough

WASHINGTON OUTLOOK

(Continued)

WASHINGTON
BUREAU
MAR. 31, 1951

defense has been set in motion to make some pinches after midyear certain.

For instance, hard goods make up the big share of this year's \$40-billion military program. Wilson reports about 75¢ of every dollar is going for planes, tanks, trucks, guided missiles, electronics, ammunition, construction.

This pattern is scheduled to continue, except for some decline in construction activity. So Wilson figures that manufacturers of consumer durable goods will have to get by with something like 15% to 20% less materials than last year.

The deepest cuts won't come before mid-1952. That's when military deliveries are expected to reach their peak. Wilson says lead may have to be restricted, and zinc, too.

And more capacity will be needed. Take electronics: The military is supposed to need \$4.8-billion worth of goods this year, and around \$5.5-billion next year.

Wilson hopes all this will go smoothly. But a prolongation of today's low-pressure atmosphere in Washington will delay deliveries of military goods beyond target dates. (Indeed, Pentagon procurement men admit they aren't prodding contractors to meet schedules.)

At worst, the whole show could fold. This is Gen. Marshall's concern when he says: If we can't keep up the pace for even three months after the black days of Korea, how do we expect to sustain it for five or 10 years?

•

Fast amortization of new plants is running into more trouble. A lot of businesses were disappointed when the first certificates of necessity granted five-year writeoffs on less than 100% of the expansion.

But now the mobilizers are accused of being too liberal. Congress is getting howls that amortization is a tax-giveaway.

Behind the complaints is this: Some rayon mills—competitors of cotton—have got certificates; also, expansion takes metals that consumer goods manufacturers would otherwise get.

Sen. Maybank's mobilization watchdog committee is going to investigate starting next week. The inquiry is a boon to Wilson. Now it will be easier for him to limit certificates to those plants producing military end-use items.

Upshot: Wilson won't cancel any writeoffs already approved. But the latecomers, even competitors of companies already awarded certificates, will find the welcome mat gone.

•

You can get a guide for making price lists under the consumer soft-goods order (CPR-7). Write the Office of Price Stabilization, Washington 25, D. C.

•

Big tax collections this month mean a balanced budget come June 30.

The boom is making business and personal income much larger than the Treasury expected. The \$2.7-billion deficit forecast a year ago won't materialize. Instead, the government will end this fiscal year with a \$1-billion surplus, or more.

The outlook is for still another jump in revenue in 1952. The Budget Bureau now thinks mobilization will cost only about \$8-billion more than taxes will bring in—not the whopping \$16.3-billion Truman predicted in January.

DUCTILE IRON

A Revolutionary Metallurgical Development

DUCTILE IRON is a cast ferrous product which combines the *process advantages* of cast iron with many of the *product advantages* of cast steel. No longer in the pilot-plant stage, this new material is now produced and sold on the basis of specifications. Not only are its individual properties exceptional, but no other com-

mon engineering material provides such a combination of excellent castability and fluidity, with high strength, toughness, wear resistance, and machinability.

Actually, "ductile iron" denotes not a *single* product, but rather a family of ferrous materials characterized by graphite in the form of spheroids . . .

a form controlled, in a broad sense, by small amounts of magnesium. Presence of spheroidal rather than flake graphite gives this new product a ductility that is unique among gray cast irons.

Four important types of ductile iron now being produced commercially are tabulated below.

REPRESENTATIVE MECHANICAL PROPERTIES OF COMMERCIAL HEATS OF DUCTILE IRON

Grade	Tensile strength, psi	Yield strength, psi	Elongation per cent	BHN	Usual condition
A	90-65-02	95/105000	70/75000	2.5/5.5	225/265
B	80-60-05	85/95000	65/70000	5.5/10.0	195/225
C	60-45-15	65/75000	50/60000	17.0/23.0	140/180
D	80-60-00	85/95000	65/75000	1.0/3.0	230/290

A Pearlitic in structure. Provides good mechanical wear resistance.

B Pearlitic-ferritic in structure. Provides strength and toughness combined.

C A fully ferritic structure usually obtained by short anneal of either (A) or (B). Provides optimum machinability and maximum toughness.

D Higher phosphorous content than preceding grades, also higher manganese. Provides high strength and stiffness, but only moderate impact strength.

SOME UNIQUE PROPERTIES OF DUCTILE IRON

1. Its elastic modulus, about 25,000,000 psi, is virtually unaffected by composition or thickness . . .
2. It can provide a chilled, carbidic, abrasion-resistant surface supported by a tough ductile core. No other single material can combine these properties . . . its only counterpart being a tough material coated with a hard welded overlay.
3. As-cast ductile iron of 93,000 psi tensile strength has the same machinability rating as gray iron with a strength of 45,000 psi.
4. Annealed ductile iron can be machined at a rate 2 to 3 times that of good quality gray iron.
5. It can be satisfactorily welded.

APPLICATIONS

Automotive, agricultural implement, railroad and allied industries apply ductile iron, as-cast and heat treated, in components too numerous to detail.

Machinery, machine tools, crankshafts, pumps, compressors, valves and heavy industrial equipment such as rolls and rolling mill housings, utilize its high strength and rigidity.

In scores of engine, furnace and other parts serving at elevated temperatures, it provides oxidation and growth resistance heretofore unavailable in high carbon castings.

Other applications include paper, textile and electrical machinery, marine equipment, and pipe.

AVAILABILITY

Send us details of your prospective uses, so that we may offer a list of sources from some 100 authorized foundries now producing ductile cast iron under patent licenses. Request a list of available publications on ductile iron . . . mail the coupon now.



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Please send me a list of publications on:

DUCTILE IRON

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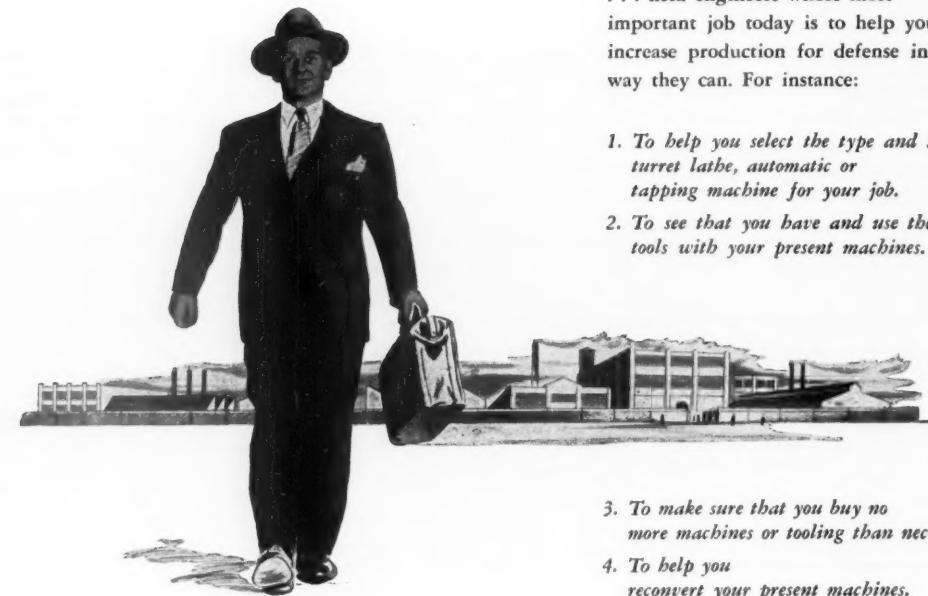
● This question is being asked of us pretty frequently.

Actually our "salesmen" are 45 factory-trained machine tool specialists . . . field engineers whose most important job today is to help you increase production for defense in every way they can. For instance:

1. *To help you select the type and size turret lathe, automatic or tapping machine for your job.*
2. *To see that you have and use the right tools with your present machines.*

3. *To make sure that you buy no more machines or tooling than necessary.*
4. *To help you reconvert your present machines.*
5. *And, as always, to recommend the machine you need—even if it ISN'T a Warner & Swasey.*

Busy as he is, your Warner & Swasey Field Engineer will be glad to help you whenever he can. He's a good man to know these days. Get in touch with him when you have a machining problem.



What are your salesmen doing these days?



- Retail sales this Easter were disappointing.
- Volume of goods sold was less than in the pre-Easter season last year.
- The scare-buying wave is definitely over.
- But retailers aren't worried by their high inventories. They still think goods are better than dollars. They plan few clearance sales.
- A groundswell of purchasing power, they figure, will clear their shelves by summer. Looking at the whole picture of . . .

Easter Sales—Nobody's Scared

"The Easter season was rough," said an Omaha retailer this week, "but if the weather is good in April we won't have any trouble making up for the lost business."

This sums up succinctly the general feeling of merchandisers across the country as they tot up their holiday business. Easter sales were generally disappointing this year, they agree. But no one is seriously worried about the future.

• **What Figures Show**—Federal Reserve figures for the week ending Mar. 17 show that department store sales dipped 4% from the week before. That put them only 11% above the corresponding week of 1950 (which was not part of the Easter period). Spot reports for this year's Mar. 24 week follow the same pattern. New York department stores showed only a 6% gain over the same week last year. In Philadelphia the gain was only 3%.

But that doesn't tell the whole story. Easter came earlier this year. If you compare the second week before Easter last year with this year's second week, you'll find that 1951 was about 3% below 1950 on a dollar basis.

• **Short of the Trick**—The reports from across the country are almost uniformly the same. With only one or two exceptions, retailers report that their business ran a little behind last year's Easter period, or just about equaled it. Where business bettered 1950, it usually did it by only a fraction.

This fell far short of doing the trick. Because of price inflation, the stores would have had to exceed last year's comparable weeks by substantial margins to do well. Even retailers who were able to come close to last year's

dollar volume ran behind in unit volume because of the higher 1951 tags.

• **Slow Movers**—What lines moved slowly? There seems to have been no pattern. Women's apparel did well in Atlanta, poorly in Cleveland. But children's wear didn't do so well in Atlanta, whereas it proved a bright spot in Chicago and Cincinnati. You find the same thing in appliances, housewares, and other lines. In short, the sales lag on an over-all basis went pretty much across the board.

• **What Caused It?**—Two factors get the biggest share of the blame for this showing—the early Easter, and the generally poor weather in March throughout the country.

Retailers always worry about an early Easter. It's too near Christmas, and people aren't in a springlike mood yet. Furthermore, the nation is still nursing along what cash it has left over from paying income taxes. On top of this, there's apt to be poor weather.

This year there was. March was raw and rainy, and flu epidemics like Cleveland's kept people out of crowded stores. The effect of the weather can be gauged from San Francisco's experience. There, after a rainy winter, the weather turned glorious—and Easter sales in San Francisco did fairly well.

As if this weren't enough, there were also the Kefauver committee crime hearings in New York City (BW-Mar. 24'51,p21). There's no doubt that they kept a lot of people glued to their T.V. sets and out of the stores. Retailers as far south as Atlanta, and as far west as Chicago, grumbled about them.

• **End of Spree**—But beyond all this lay another major factor: The post-Christ-

mas buying spree apparently tapered off—and right in the middle of the Easter season.

You can see the pattern by picking examples at random. In Cleveland, sales were boiling along beautifully until about Mar. 17. Then they began to slump. In Pittsburgh, the post-Christmas boom hit its peak the last week of February (37% above last year), then sales began to tail off steadily. During the pre-Easter week, sales for the first time this year were lower than last year's (down approximately 3%).

• **Had to Happen**—Though the timing was uncomfortable, it had to happen some time. Back when the post-Christmas sales boom was still a novelty, economists wondered if it could last through February (BW-Feb. 3'51,p45). The reasoning then was that we were in the midst of another ripple in the economy, one set off largely by threats of shortages, rising prices, and bad news from Korea.

Now the impetus to scare-buy is gone. Anyone can see that goods are piled up to store rafters. Bitten twice by the rumor that goods would disappear overnight, consumers are now biding their time.

• **Not Worried**—Even so, retailers are not worried. They know there's a heavy groundswell of buying building up, generated by the nation's rising income. And they also know that before long shortages will begin biting into civilian production. That's why they aren't concerned over the big inventories left over from a disappointing Easter.

Here's a sampling of retail opinion to show how the wind blows:

Chicago: "Sure, stocks are big. But we expect to work them off by the end of the spring season."

Worcester, Mass.: "Clearances? I'd rather have the goods than the money. Wait until you see the fall prices; they'll make your hair stand on end."

Akron: "It's better to be on the high side of stocks as you enter a period of shortages."

• **Inflated Inventory**—Retailers will also point out that, if you take into account the inflation of prices, inventories tend to shrink somewhat in terms of units. They also report that, while they stocked up heavily on staples because of impending shortages, they have played a conservative inventory game on style items. The retailers also have on their side another factor: The accumulation

of inventory is about reaching its end. Some time in the spring, it looks as though inventories will have reached their peak, start on the downside (BW—Jan. 13 '51, p46).

• **Few Clearances**—All this means that it is unlikely that you will see many big clearance sales in the post-Easter season. Here and there trouble looms. In Seattle, for example, the big stores are said to be watching each other warily, each hoping the other isn't going to knock the props out from under prices with a slashing clearance sale. And in Washington, D. C., there's some worry that little retailers, caught with inventories they can't hold any longer, will liquidate. But for the most part, stores report that they have no intention of holding clearances on a large scale.

Generally, retailers are convinced that the business ahead is going to be fine. They think that when you total up the whole March-April period—even despite the slim Easter—you will see sizable gains over last year.

Food Markups Set

Processed foods came out from under the Jan. 25 price freeze this week—and into price controls of their own. The Office of Price Stabilization set up Regulations 14, 15, and 16, prescribing percentage margins on cost that wholesalers and retailers may take for butter and for each type of packaged or canned food. Stabilizer Michael DiSalle thinks a host of rollbacks will result—and some price increases.

There are four separate sets of margins. The highest goes to independents with gross sales last year of less than \$75,000. Independents in the \$75,000-\$375,000 bracket come off next best. Chain units with volume of less than \$375,000 are skimped still more. Any store—chain or independent—that exceeded this gross gets the skimpiest margin of all.

Sample of the spread: Margins on canned soup in the four different classes of stores were set at 27%, 26%, 19%, and 19%, respectively.

Beginning Apr. 30 and every week thereafter, each retailer will have to refigure his prices by applying his margins to the average unit cost of the most recent shipment.

Some time this summer, DiSalle hopes to replace these margins with communitywide dollar-and-cents ceilings.

Unprocessed foods—fresh milk, meats, fruits and vegetables, beverages, and candy—remain under the general Mar. 25 freeze; special orders to cover them are now in preparation.

This week's orders on processed foods are modeled after those of the wartime Office of Price Administration.

Boron Stops Knock

Adding the element to leaded gasoline will reduce need for higher-octane fuels in older engines with carbon in them.

Every car owner knows that as his engine gets older and cakes up with carbon he has to use higher-test, higher-octane gasoline to keep it from knocking. That may soon be a thing of the past.

• **Boron Effect**—Dr. E. C. Hughes, director of Standard Oil Co. of Ohio's Cleveland laboratory, has discovered that a small amount of the element boron added to leaded gasoline can cut down the octane requirements of an older engine by five to 20 points. Hughes has been studying the boron effect with Ethyl Corp. He will report the results to members of the American Chemical Society in Cleveland next month.

• **What Makes Knock**—To understand exactly what boron does, it is necessary to analyze the cause of carbon knock in an engine.

As you burn gasoline in an engine, carbon deposits form on the inside of the cylinders. When these deposits get hot, a catalytic action ignites the gasoline before the sparkplug fires. The explosion acts against the pistons an instant before the proper time, inter-

rupting the smooth flow of power and producing knock.

Adding lead to gasoline makes it harder to ignite it, preventing the deposits from touching it off before the spark gets a chance. But as the engine gets older, the deposits get thicker—and hotter. Then you have to use gasoline with still more lead in it, a higher-octane gas.

• **Cools Deposits**—The boron compound that Dr. Hughes is experimenting with is mixed right in with the lead additive, and both are blended with gasoline. But the boron has no effect on how fast the gas ignites. It does its work on the knock-producing deposits themselves.

Hughes found that boron counteracts the catalytic action of the substance in the deposit-cooling it, in effect. Though deposits will continue to build in an engine using boron gas, they will have boron in them, and you will not have to use gasoline with increasingly higher octane ratings.

• **Tests**—Using two new engines, Hughes found that the octane requirements in an engine burning gasoline without boron jumped from 78 to 90 after 100 hours of operation. The one using gasoline with boron had an octane requirement of 78 at the start. It climbed to 82 at the end of 35 hours—and stayed there. It was still at 82 after 100 hours. Then Hughes fed regular gas to the same engine, and its octane requirement jumped to well over 90 in the next 50 hours.



Family Bomb-Shelter Business Blossoms

You can always count on an American to find a profit in any turn of events, no matter how serious. All over the U.S. these days little businesses are springing up, intent on getting rich in the bomb-shelter business. In Los Angeles, which always does such things big, this Bomb Shelter

Mart has sprung up on Wilshire Boulevard—complete with the Hollywood touch of garish signboards. The mart sells two types of family shelters—the small circular kind shown here, and a larger one, complete with radio. The smaller model sells for around \$795.

End of TV Freeze Nears

FCC's proposals would open up nearly 2,000 new spots in 1,200 communities. Industry generally approves plan, but some see threat of monopoly in way allocations would be parceled out.

The Federal Communications Commission has finally made its first major move toward thawing out its two-and-a-half-year-old freeze on the television industry. Last week it issued its long-awaited Third Notice of Further Proposed Rule Making. It's a 60-odd page document outlining the commission's ideas on what kind of television stations should be put where.

• **Big Step**—This is a big step forward. But it would be a mistake to look for new TV stations the day after tomorrow—or even next month. The commission must go back into hearings on the new proposals on May 23 before it can pass out, once and for all, the cherished wavelengths. For its part, the TV industry doesn't look for an actual end to the freeze until sometime in the fall or winter.

Basically, the new FCC proposal would do four major things. It would:

- Open up the UHF (ultra-high-frequency) spectrum to TV. FCC promises at least 52 new channels—possibly more—to the broadcasters.

- Set standards for the operation of TV stations that will eliminate interference between stations (the problem that brought about the freeze in the first place).

- Make nearly 2,000 UHF and VHF (very-high-frequency) allocations to more than 1,200 communities. (Very-high-frequency is what TV uses now.)

- Reserve for educational, noncommercial use approximately 10% of the available locations.

- **Generally Liked**—You won't hear much complaint about the overall job. As for the operating standards set up by FCC, almost everyone is agreed that the commission has done about as perfect a job as it could.

In setting its standards, FCC didn't have to increase the separations between stations so much as it originally thought would be necessary to end interference. VHF stations using the same channel, for example, have been 150 mi. apart; under the proposed standards they can be placed 180 mi. apart, instead of the 220 mi. first proposed. Only 31 stations will have to move. UHF co-channel stations will have to be 165 mi. apart.

The industry as a whole thinks these requirements are fine; it feels the same way about FCC's measures to end technical interference problems. It is also happy over the new provi-

sions to raise the power of TV stations.

- **Dissent**—It's on the business of allocations that the industry's unanimity abruptly ends. Television Digest, the bible of the trade, sums up the general view with the remark, "Excellent engineering—diluted with weak judgment."

It's only fair to say, however, that no matter how FCC carved up the spectrum and parceled it out, somebody was bound to get mad. The commission was caught in a series of power plays. And the big, juicy plum everyone wanted was a VHF station.

There are a lot of reasons why VHF is preferable to UHF. For one thing, it's obvious that, until people get converters or until sets are made with them, there is simply no audience for UHF. Furthermore, though almost everyone sees a big future for UHF, it's still experimental. Even when perfected, it may not have so much range as VHF.

- **Too Kind to Farmers**—The big charge against FCC raised by one segment of the industry is that the commission, in passing out the VHF assignments, was entirely too kind to rural areas. It's because of this, say these critics, that the commissioners had to resort to "intermixture"—assigning both UHF and VHF channels in the same markets (BW-May'50, p30).

The critics have done a fast analysis of the allocations proposals and have come up with such statistics as these: All the first 50 markets in the U.S.—with the exception of Miami—will have intermixture. There are just six cities in all the U.S. that will have at least four commercial VHF channels. In the six states of New York, Pennsylvania, New Jersey, Connecticut, Rhode Island, and Massachusetts (with a quarter of the nation's population), only eight cities will have four or more commercial outlets of any kind and only four cities will be without intermixture.

- **Monopoly**—The critics are gravely worried about the possibilities of network monopoly. Too many major markets will have fewer than four outlets, they argue, which won't bother CBS and NBC, but might shut out smaller networks.

- **UHF**—How long it will take to get UHF under way is very much an open question. Manufacturers of TV sets will make converters and build them in

their sets just as soon as there is a demand. Providing, of course, that they can get the materials.

UHF transmitting equipment may take somewhat longer to produce because of technical problems.

You can expect the critics of the FCC allocations plan to take their case before the public and before Congress. That they can stop the plan appears unlikely at the moment. Meanwhile, you can watch the 370-odd applicants for TV wavelengths—plus others who will now show up—fighting madly in Washington for the 377 VHF channels open to them.

Union Talks Slowdown To Save Vice-President

Unions often strike or slow down to keep people from getting fired—their own people. This week one union, the Brotherhood of Railway Trainmen, said it would start a slowdown to keep a man in his job, but it wasn't one of their own men at all. It was an executive vice-president of the New York, New Haven & Hartford R.R.—J. Frank Doolan.

- **Opposition**—BRT wants Doolan kept on his job; Frederic Dumaine, tough old boss of the New Haven, ordered him to retire—possibly because Doolan doesn't want to carry out Dumaine's austerity policies anymore. James J. Hammill, BRT's general chairman, immediately announced that, if Doolan goes, the trainmen will begin enforcing to the letter a lot of operating rules that are generally bypassed in favor of shortcuts. This would drag down the whole New Haven schedule.

- **The Buildup**—The New Haven situation has been building up a long time—ever since Dumaine began his wholesale firings of top operating personnel (BW-Sep'50, p64). Today only two oldtimers are left, the financial and legal vice-presidents, but they're not operations men. Dumaine's opponents claim he is stripping the road of competent but well-paid men and replacing them with lower-paid people he has literally jerked up through the ranks.

Anti-Dumaine people cite the case of Harry McGill, New Haven vice-president, who now runs the road for Dumaine and does the actual ax-swinging. McGill was company storekeeper at a salary of \$10,000 until he was made vice-president. As far as anybody knows, he is still making only \$10,000.

- **Free-for-All**—Dumaine has until Apr. 11—the time of the annual meeting—to make up his mind on Doolan. A lot of New Haven stockholders are sore at Dumaine anyway, so the stockholders' meeting will probably be a free-for-all for power.



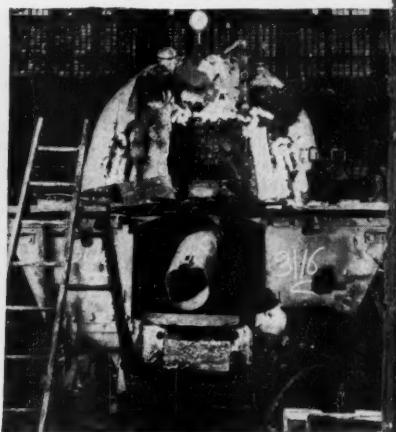
QUEUEING UP

Road-worn steamers sit in "graveyard" outside New York Central's West Albany Shops. Over 300 are overhauled each year.



STRIPPING

Sandblasting removes grit. Engines go inside for . . .



ASSEMBLY

At cab end, workmen insulate firebox, while . . .

Rail Boom Puts Steamers Back to Work

The steam locomotive won't be in the Smithsonian for a while to come.

Until the Korean War broke, roads were scrapping steamers and going diesel in a big way. They're still going diesel, but not scrapping. By the end of 1951, nearly half of the engines in use—16,000 of them—will be diesels. But because of increased traffic loads since Korea, railroads are overhauling and pampering any engine that pulls.

• **Central's Project**—The New York Central, which placed a \$64-million diesel order this month—the largest in history—is also doing one of the largest jobs of rehabilitating veteran steamers (pictures). In September of last year, the Central set up an accelerated overhauling plan. The West Albany (N.Y.)

Locomotive Shops ran a six-day week, nine hours a day. By December the Central junked the stepped-up program for lack of materials, returned to a five-day week—and hoped it wouldn't have to cut back more.

West Albany is running five days a week now only by grace of National Production Authority's over-all order for maintenance, repairs, and operating supplies (MRO). But with a special MRO for railroads expected this week, the Central, like other roads, hopes to continue its program—without worrying about materials shortages.

• **Long Life**—If doctored properly, steamers can outlive elephants. Overhauling, a soup-to-nuts affair, takes 14 working days. While diesels get "pro-

gressive" maintenance at the end of each haul, steamers are dismantled, then reassembled at fixed mileage marks—every 285,000 mi. for Niagara types, every 200,000 for Hudsons. West Albany employs 1,350 men who complete six overhauled steamers every five days, or 312 a year. The Central's other shops at Beach Grove (Ind.) and Collinwood (Ohio) overhaul less than one locomotive a day.

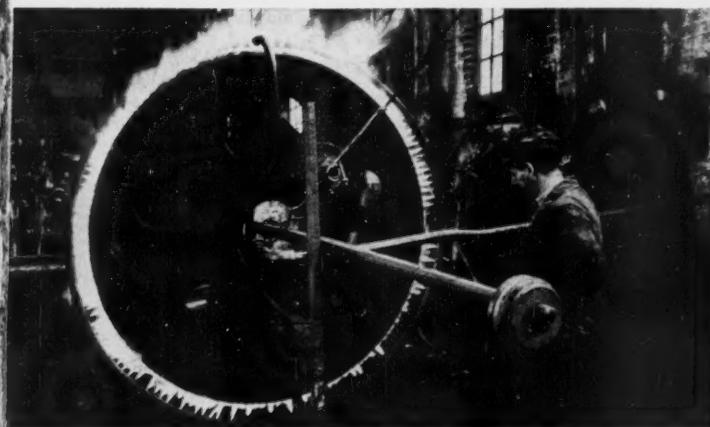
• **By Classes**—Repairs go by classes. For example, Class I repairs may involve a \$35,000 boiler; Class II, a new, less-expensive firebox. Average overhauling cost runs at about \$26,000. But that's a small outlay compared with \$450,000 for a new two-unit diesel—and you get results in two weeks.



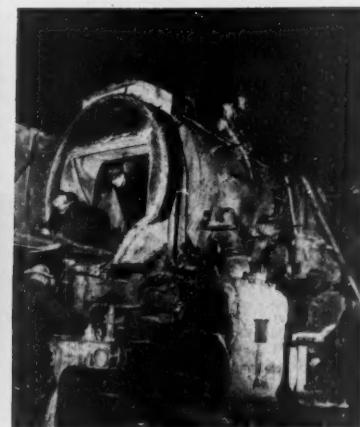
DISMANTLING. Smoke flues and cab are removed; locomotive boiler is lifted off. New boiler (below) will replace old one. Used parts, some still good, go to . . .



SCRAP PILE. These are leaf springs lined up, behind the overhaul shops.



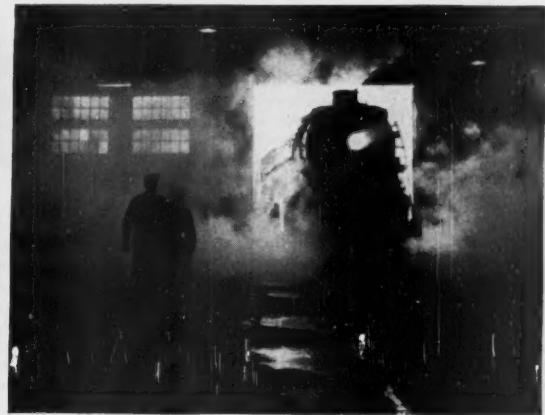
OLD TIRES are "burned off" wheels in machine shop. New steel tire is heated, put on, then cooled. As worn parts are cleaned and replaced in specialized shops . . .



REBUILDING continues with a beehive of activity. Locomotive rests on wooden blocks.



LAST LAP Wheels and pistons are fastened on—14 working days after initial sandblasting. Then . . .



FIRED UP, locomotive backs out under own steam for a short run on test track. Rebuilding 300 engines costs about \$8-million.

Big Spending

Industry plans to buy more plant this year than ever before. But mobilization needs will dictate the total.

When it comes to industrial expansion, all the signposts point straight up.

Business is planning to lay out a record amount of money for new plant and equipment this year. Every major branch of industry is heading for goals in capital spending that have never been reached before.

• **Surveys**—A report on capital spending released this week by Securities & Exchange Commission and Dept. of Commerce shows the same trend that is shown in the survey made by the McGraw-Hill Dept. of Economics (page 67). The Commerce Dept. survey indicates that business plans to spend 29% more for plant and equipment in 1951 than it did in 1950. And 1950's total of \$18.6-billion was not far behind the peak of \$19.2-billion set in 1948.

Here is how business spending will break down:

	1950 (Millions of Dollars)	1951
Manufacturing	\$8,220	\$11,920
Mining	680	890
Railroads	1,140	1,520
Other transportation	440	620
Electric and gas utilities	3,170	3,540
Commercial and misc.	4,920	5,410
Total	\$18,560	\$23,910

• **Pattern**—Quarterly spending is expected to reach a peak in the second quarter of the year—and then stay at that height for the rest of the year. But whether that will actually be the pattern depends mainly on the availability of materials and the supply of manpower. The materials needed for business expansion and the military's bite on goods are due to meet head on near the end of the year. That means tough sledding for some of the "non-essential" expansion programs now in the works.

• **Big Spender**—The Commerce Dept. survey slates the largest gain in capital spending for manufacturing industries. For all manufacturing, outlays are supposed to rise 45% above 1950. That's a little lower than the total reported in the McGraw-Hill survey, which is based mostly on the larger companies in industry.

Normally, the small companies do not budget ahead so far as the large ones. Their plans are more subject to change. Up to now, many of them have not yet received defense contracts so they have no need to try to expand to fill them. There's a good chance that, when the dribble of military goods

turns into a torrent and seeps down to the small supplier, the smaller firm may have to revise its capital spending program upward.

• **Upward Shift**—Since last December, businessmen have changed their minds about how they intend to spend for new plant. But they have continually been revising their spending plans ever since the beginning of 1950—and always on the up side.

Capital spending for the final quarter of 1950 was higher than was reported it would be in the Commerce Dept.'s regular quarterly survey. And at that time business thought that 1951 plant and equipment expenditures should run about 21% over 1950's near-record total. After a second look at the booming civilian side of the economy and the quantity of military goods yet to be produced, even that has been upped another 9%.

• **Dollar Down**—The capital spending plans for 1951 are big. But they are not quite so big as they look at first glance. The dollar is worth a lot less now than it was worth last year. Commerce Dept. estimates that around one-third of the planned increase over 1950 represents loss in the value of the dollar.

Crop Shock

Government sets target for record planting, but returns from farmers show that acreage will be even lower than 1950.

Government crop planners were dismayed this week at signs that their plans for the biggest year in farm production are falling through. Instead of aiming at the target of record acreage set for them by Agriculture Dept.'s production guides (the new version of wartime crop goals), farmers are planning to plant even less than last year when Agriculture put curbs on most big field crops.

• **Disappointing Returns**—The department's production guides call for 6% more acreage than in 1950, or 3% more than the biggest plantings on record. But first returns from farmers show that they plan to plant only 275.5-million acres in spring-seeded crops compared to 280-million acres in the same crops last year.

Farm experts pin this poor initial showing on (1) scarcity of farm labor,



'Copter Goes Up—Price Goes Down

Helicopters are coming down-down to slightly more reachable price levels, that is. This McCulloch MC-4, recently tested at Los Angeles, figures to sell for \$15,000. In fact, really big production might bring the figure down to \$10,000, according to Robert P. McCulloch, president of McCulloch Motors Corp. But don't reach for your checkbook too quickly; the armed services are interested in the ship, and it may be pretty largely snatched out of the

civilian market for which it was designed.

The low cost was achieved by incorporation of standard automobile parts, along with several brand-new gimmicks. The MC-4 has exceptional smoothness in flight, derived from its twin, intermeshing, three-bladed rotors. The ship is powered by a standard six-cylinder 165-hp. engine, mounted horizontally. The all-metal rotor blades are made by a new method, which cuts cost to \$3 a ft.

(2) fear of a developing shortage of farm equipment and supplies, and (3) reluctance to plow up newly created grasslands. Possibly more important than all these, however, is the timing of Agriculture's guide. It came out in February—after many farmers had made their decisions on the year's work.

• **Faint Hope**—There's still a glimmer of hope in Washington that returns on cotton acreage—still to come—may boost the totals much nearer the target. The size of the cotton crop will be unknown until summer when the department is first permitted to estimate cotton acreage. But that's a slim hope at best. In undershooting the corn target by 5-million acres, farmers are planning the biggest cuts in Iowa and Nebraska—well outside the cotton belt.

• **Breakdown**—Production guides suffered most in the plans for feed crops—corn, oats, barley, and sorghum grain. Here the target was 127-million tons of livestock feed for the feeding year beginning next fall. Farm plans, however, add up to only 117.5-million tons—7.5% less than the goal—which could leave the nation with little or no carry-over at the end of the summer of 1952.

In the food crops—wheat and rice—farmers bettered the production guides by modest margins. Extra wheat, however, will be fed to livestock to eke out scarce supplies. With this in prospect, commercial grain users—distillers, brewers, millers, bakers, prepared-cereal processors, and syrup makers—can expect allocation and inventory restriction.

Pillsbury Mills Buys Southern Company

Economists are fond of pointing out that flour milling is a declining industry. But to Pillsbury Mills, Inc., of Minneapolis, there is still plenty of room for expansion. Last week, Pillsbury announced that it was buying Ballard & Ballard Co., Louisville milling firm.

The deal isn't sewed up yet, but it probably will involve between \$12-million and \$15-million. The merger will not be closed until both the Federal Trade Commission and the antitrust division of the Dept. of Justice have reviewed and blessed it.

• **No Changes at Ballard**—Ballard will operate as a separate unit within Pillsbury, and its brands will be retained.

Ballard's total annual sales now run more than \$30-million. Pillsbury sales for the year ended May 31, 1950, totaled \$200,963,966. Purchase of Ballard dovetails into the company's expansion and diversification program, which started in 1940 with the purchase of Globe Grain & Milling Co. of Los Angeles and the development of Pillsbury's West Coast division.

DiSalle's Sunday Punch

Office of Price Stabilization is finally readying a program to level off prices. Industry representatives are up in arms: Their recommendations aren't getting to first base.

After two months of windup, the Office of Price Stabilization is ready to throw some Sunday punches.

Some time soon, it will put out two sweeping orders designed to roll back prices and squeeze profit margins:

• A manufacturers' pricing regulation will limit increases to only a part of the rise in direct labor and material costs since Korea.

• A special machinery order will be even tougher; it will wipe out many of the price hikes of the last nine months.

Later on, OPS will follow through with stiff regulations on livestock and food at retail. Cotton has already been put under a ceiling that has growers and traders screaming (BW-Mar. 17 '51, p.25).

• **Carefully Planned Campaign**—Always the politician, stabilizer Mike DiSalle knows that writing an effective order is not enough. He must also protect himself against possible charges that his ceilings are arbitrary, showing no grasp of business problems.

So DiSalle has been processing his orders with the greatest deliberation. He has had industry representatives at his elbow at practically every stage. The weight he gave to their recommendations, however, wasn't always in keeping with the deference shown.

• **Price Regulation Skirmish**—Take the manufacturers' price regulation, for example. The order was first drawn by top OPS policymakers with little or no industry assistance. Then it was batted around by the staff for a while. Not until Mar. 12 was a draft—the fourth—ready to be shown to an industry advisory committee.

The order would permit manufacturers to raise their prices to make up for increases in direct labor and material costs since Korea. (Pensions and other "fringe" costs would be considered direct costs.) But the advances had to be limited to (1) 10% above the highest price charged during the second quarter of 1950, or (2) 5% above the Jan. 25 freeze level.

One look at this draft and committee members promptly howled. They cited case after case where specific costs, playing a large part in fabrication, had skyrocketed. And they showed how indirect costs had risen sharply, too.

• **Backfire**—What the industry people left unsaid was this: Forcing costs absorption might backfire; manufacturers may find they have to disregard the

OPS regulation just to stay in business. DiSalle knows that a tough order may well lead to widespread violation. But he feels that the choice before him is this: Get tough or get out—under a cloud. Right now, he prefers to gamble on the enforcement machinery his staff is building.

So DiSalle told the committee that it could submit alternative formulas. But he bluntly warned: "We feel that we have to issue this type of order. It may cause the hardships you describe. We will listen to you. But in the end, we will issue the type of regulation we think necessary."

A week or so later, the committee came back with a set of suggestions that boiled down to this: Liberalize or eliminate the 5-and-10 limitation. DiSalle appointed an OPS task force to attempt to reconcile the divergent views. But the final draft followed the language of the staff proposal.

• **Machinery Ceilings**—The story of the machinery order is somewhat similar. The working draft originated at the top OPS policymaking level. Few of the men in charge of the various special machinery sections of the machinery division were even told the provisions of the order.

The regulation requires machine builders to make their ceiling prices equal to the highest price they charged in the first half of 1950, adjusted for increases in direct labor and material costs.

No provision is made for the recovery of increased engineering, developmental, and other indirect (or overhead) costs. That means profit margins are bound to be squeezed. The fact that machinery prices actually have risen more than the formula allows means manufacturers will have to roll back all along the line.

Machinery makers began battling the order as soon as they got their first look. They told OPS that they would prefer to stay under the Jan. 25 freeze. But they haven't been swinging much weight.

• **More, Tougher Orders**—Early this week, livestock raisers who journeyed to Washington to "confer" on ceilings got the same "we're listening—but" treatment. From now on, you can look for orders that are tough. They may have been shown to industry representatives. But that doesn't mean the orders in any way reflect industry's point of view.

Tire Drought

Tire industry seeks more civilian rubber, specially for trucks and buses. It says U.S. is storing too much crude.

The U.S. is in for tire trouble this summer if restrictions on civilian rubber aren't eased. The supply will be tighter than at any time since World War II's rationing ended.

The squeeze already has the tire makers yelping. They can sell every tire they can make. Their dealers are on allocation. And shipments are outrunning production by thousands of units every month.

Last week the tire industry appealed to the National Production Authority for an extra 10,000 tons of natural rubber for truck and bus tires in each month of the second quarter. So far NPA has shown no sign of granting it.

• **Heavies Hit**—The worst pinch is in truck and bus tires. It's estimated that output of heavy-duty casings is running 200,000 units a month below needs. Trailer and truck manufacturers have told NPA they can't get enough casings to deliver their vehicles.

Passenger tires are better off because most cars on the road have fairly new rubber on them. Yet the latest figures showed that manufacturers had only a two weeks' inventory; normally, they have two months'. January shipments topped output by 300,000 units.

In Akron, lack of rubber has forced B. F. Goodrich Co. to lay off 1,500 workers; other plants are working short hours. There's not enough civilian rubber to fill orders, and defense orders are still too light to keep workers going full tilt.

• **Fat Stockpile**—What makes the tire makers sore is that they feel they are suffering from a phantom shortage. Perhaps 60% of crude rubber imports is going to the government's natural rubber stockpile. That stockpile, tire makers say, is big enough right now to fight any war. And though the synthetic program has started slowly, it will help.

The exact size of the stockpile is a defense secret. Latest guesses are that it is close to 700,000 tons, 20% bigger than at the time of Pearl Harbor.

Relief now would ease the truck tire shortage. It would help build up an industry stockpile for the summer season. It would use idle capacity before military demands swamp production (it's estimated that tire plants are operating at 80% of capacity now). It would keep manpower on tap that may be badly needed later in the year. Finally, if war breaks out soon, the rubber would be more valuable in the

form of casings than in the stockpile.

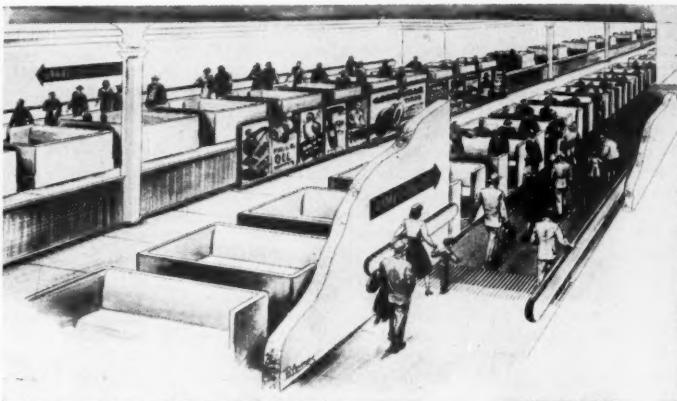
• **NPA Actions**—Two of NPA's latest actions may or may not help. First, the agency trimmed April allotments of synthetic for civilian purposes by 7,500 tons. Then it ordered a 25% cut in shipments of new tires and tubes to auto plants for the second quarter.

Theoretically, this will make 25% more tires available for older cars—if industry can maintain its present production. Full figures aren't available, but, if original-equipment shipments for the first quarter were 7.5-million,

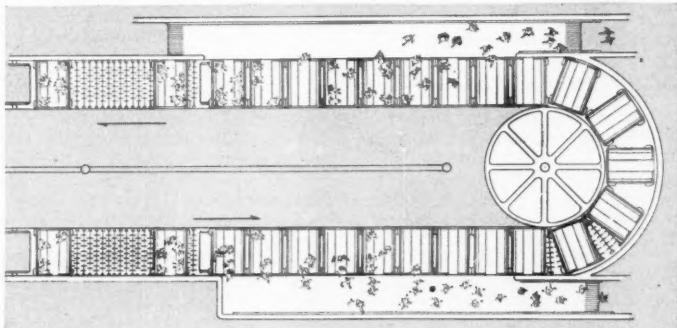
that would be 1.5-million casings.

These moves probably won't add too much to the car maker's troubles. They are due for a 20% cut in steel on Apr. 1. That cut is based on use during the first half of 1950. The 25% tire cutback is based on the first quarter of 1951, which was a record breaker.

But the 25% shift will hurt some of the smaller tire firms—the ones that don't sell to auto plants. The Big Four will have 25% more tires for the replacement market. This could put the smaller companies at a disadvantage.



Tiny Subway Cars Would . . .



Ride Belts in New York Subway

Everyone's talking conveyor belts. The Ohio coal-ore conveyor was thrown out by the legislature this week, but the Munitions Board is kicking around the idea of a belt to bypass the Soo Locks. And New York City's fearsome subway shuttle between Times Square and Grand Central Terminal will be a dead duck if Goodyear Tire & Rubber has its way.

Goodyear's idea is to set a covey of small cars going on an endless belt.

Passengers would enter from a belt moving at the same speed—a mile and a half an hour. A bank of wheels would speed cars up to 15 miles an hour, pass them to a fast belt; another bank would slow them down again to unload.

Goodyear, which developed the system with Stephens-Adamson Mfg. Co., Aurora, Ill., says it would handle a peak load of 32,000 passengers an hour in each direction.

The New NPA Regulation No. 4 *and Ryerson Steel Service*

Any business—large or small—may now use a DO rating to obtain limited quantities of steel for maintenance, repairs and minor capital additions. The rating to apply is DO-97 as authorized by the NPA's new Regulation No. 4.

Obviously the use of this rating does not automatically get the steel because it is impossible to maintain complete stocks under present conditions. However, it does assure your order of preference over unrated orders and equal treatment with all other orders bearing a priority rating. If we have the steel you get it. Moreover, we can in turn extend

the rating which should help us to maintain stocks for your future needs.

Because of broken stocks, we suggest you give us alternate sizes, gauges and qualities that would be acceptable. In this way you increase the chances of getting steel you will be able to use.

And remember, if your order falls within the provisions of Regulation No. 4 take advantage of it—use your rating! You can be sure that we will make every effort to take care of you as promptly and fully as possible.

If you do not have this Regulation No. 4 we will be glad to send you a copy.

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RADIO CORPORATION of AMERICA

State franchise taxes levied on "alien" interstate companies solely for the privilege of doing business within the state are unconstitutional, the Supreme Court ruled. The case involved a Connecticut tax on a Missouri trucking company whose business was entirely interstate in character.

Charles E. Wilson, mobilization chief and former president of General Electric, won the 1950 Medal for Cooperation of the James H. McGraw Award for Electrical Men.

Harry Ferguson's suit against Ford Motor Co. opened in district court in New York. The 65-year-old British inventor wants \$341,600,000 in damages on charges of antitrust violation and patent infringement of his tractor designs.

Servel will sell electric absorption-type refrigerators for the first time in the domestic market. The boxes, which thus far have been made only for export, need no hookup to gas mains.

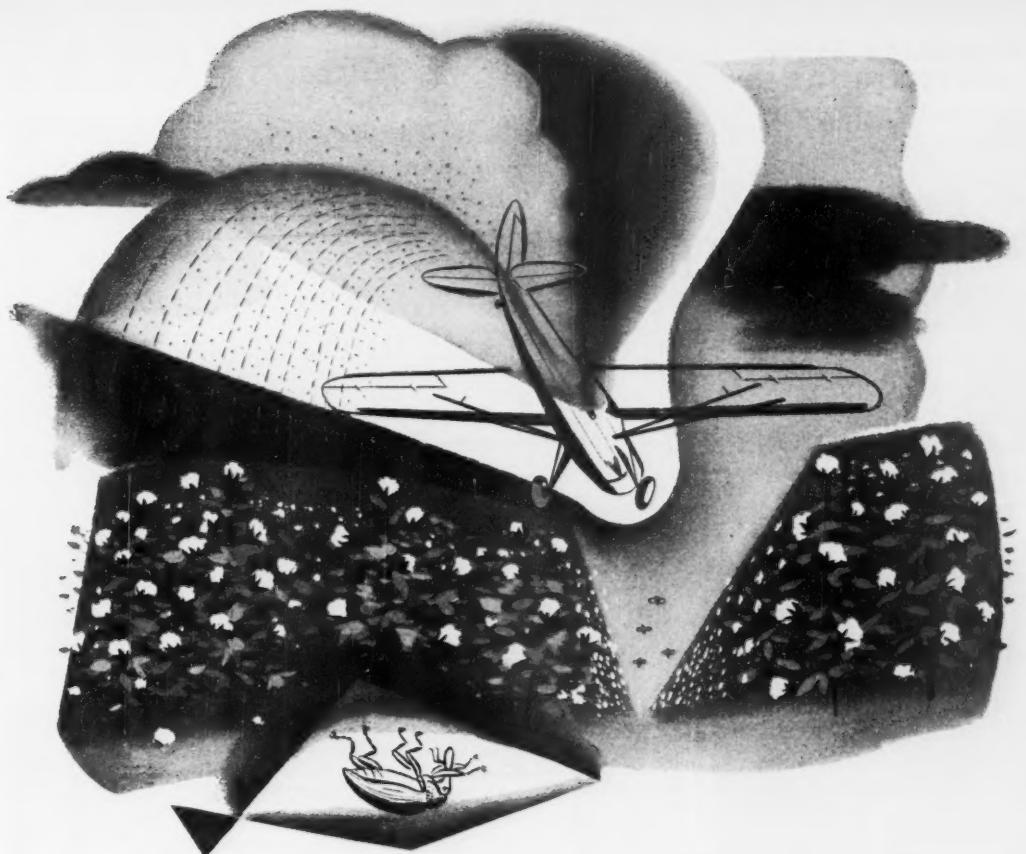
First machine-tool orders under the government's program for setting up a reserve pool went out to manufacturers. Warner & Swasey and Gisholt got the biggest contracts in the \$63.2-million total.

Railroads now want a 15% advance in freight rates instead of the 6% they asked Interstate Commerce Commission for last January. ICC gave them an interim hike of 2% to 4% just a few weeks ago.

Atom developments: Atomic Energy Commission formally announced its contract with General Electric for further development work on an atomic reactor to power aircraft (BW-Febr. 24 '51, p.23). . . . Austin Co. will build, and Dow Chemical will run, a new \$45-million atomic production plant in Colorado.

Alberta natural gas will be exported to Anaconda Copper in Montana if the province's legislature O.K.'s. Premier Manning introduced a special bill last week that would allow 40-million cu. ft. a day to flow across the border as "a defense emergency measure." Mobilization Chief Wilson had said it was needed for Anaconda's operation.

Florida lawmakers will get a bill next month requiring public officials to disclose their private assets when they take office. It's an outgrowth of the Kefauver hearings.



IN THE LAND OF COTTON



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CHEMICALS • WOOD CHEMICALS • FINE
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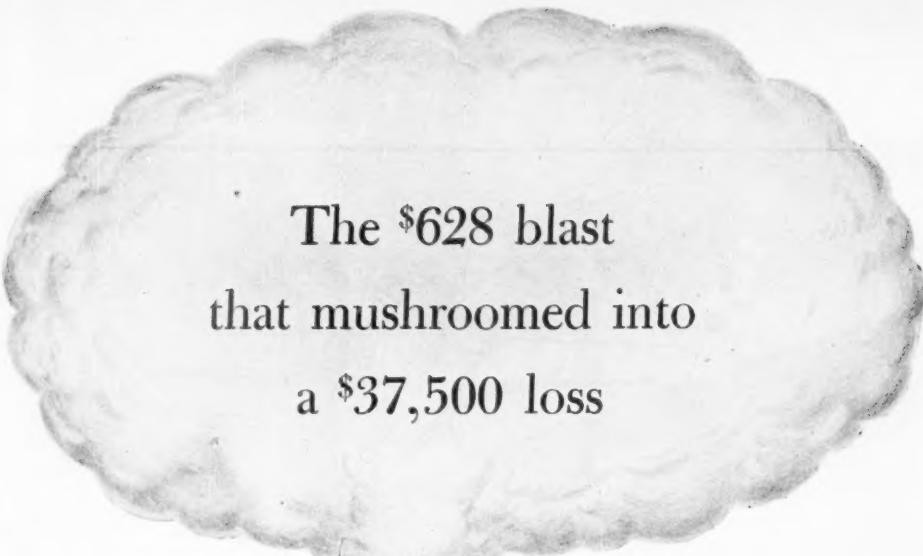
A Mighty Bad Bug

MAY SOON BE FORGOTTEN

Greatest defeat ever suffered in our southern states came from an army of bugs. Sherman's march through the South was no more than a prankish hike compared to the years of destruction wrought by the evil weevil. Millions of dollars in cotton, lost to the mighty appetite of the boll weevil, has a serious effect on the economy of our entire nation.

Now there's BHC from Tennessee to cope with the menace. Losses from the boll weevil can be made trivial. Dust and sprays with the gamma isomer of BHC can knock out the offensive insect before he has a chance to attack.

You may not need Benzene Hexachloride to beat the bug, but chances are you'll benefit from a product or chemical from Tennessee—an industry that serves all industry.



The \$628 blast that mushroomed into a \$37,500 loss

IT WASN'T a terrific explosion at all.

Two tubes in an eleven-year-old boiler in a food-packing plant gave way. No walls were blown down. Nobody was hurt.

But machines had to shut down. And while the company was spending \$628 to repair the boiler, *losses from lack of production mounted to \$37,500.*

This company didn't have to bear that loss. There was Business Interruption insurance—written in connection with a Boiler and Machinery policy. And proceeds from this insurance put the company in *just as good financial shape after the explosion as before.*

If you're like most manufacturers, you're turning over more and more of your production to machines. So when a boiler goes, or a complicated machine breaks down, you risk a bigger loss than ever, today.

Travelers Business Interruption insurance (often called Use and Occupancy insurance) is designed to take over that risk for you.

During the time production is curtailed—or stopped entirely—because of a boiler explosion, or an accident to a machine, earnings slump or stop altogether; while expenses keep right on. This insurance not only pays these continuing expenses but also the profits which would have been realized had no accident occurred.

For either manufacturing or mercantile businesses, Business Interruption insurance is relatively inexpensive. It is also available for fire, windstorm, and other hazards.

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LABOR

What's Happening to the Cost of Living

Total Cost of Living	Food	Cloth- ing	Rent	Gas & Elec- tricity	Other Fuels	Ice	House Furnish- ings	Misc.
February, 1941	100.8	97.9	100.4	105.1	97.3	104.0	100.4	101.9
February, 1942	112.9	116.8	119.0	108.0	96.7	112.0	119.7	109.4
February, 1943	121.0	133.6	126.2	108.0	96.3	117.8	124.1	113.6
February, 1944	123.8	134.5	135.2	108.1	96.0	124.2	128.7	118.7
February, 1945	126.9	136.5	143.3	108.3	95.5	124.1	144.0	123.4
February, 1946	129.6	139.6	150.0	108.3	98.8	127.8	149.7	125.6
February, 1947	153.2	182.3	181.5	108.9	92.2	142.3	180.8	137.4
February, 1948	167.5	204.7	195.1	116.0	93.2	175.4	132.2	193.0
February, 1949	169.0	199.7	195.1	119.9	96.1	192.6	140.0	195.6
February, 1950	166.5	194.8	184.8	122.8	97.1	193.2	145.5	185.3
March	167.0	196.0	185.0	122.9	97.1	194.4	146.6	185.4
April	167.3	196.6	185.1	123.1	97.2	195.6	146.6	185.6
May	168.6	200.3	185.1	123.5	97.1	189.1	146.6	185.4
June	170.2	204.6	185.0	123.9	97.0	189.4	146.6	185.2
July	172.5	210.0	184.7	124.3	97.0	190.9	146.6	186.4
August	173.0	209.0	185.9	124.6	97.0	194.4	147.4	189.3
September	173.8	208.5	190.5	124.8	97.0	196.5	148.0	195.4
October	174.8	209.0	193.4	125.0	96.8	199.4	150.3	199.8
November	175.6	209.5	195.0	125.4	96.8	200.4	151.8	202.3
December	178.4	215.4	196.0	123.8	96.8	201.3	152.1	204.8
January	181.6	221.6	199.7	126.0	97.2	201.8	152.9	208.9
February, 1951*	184.2	226.0	203.2	126.8	97.2	204.7	153.5	211.4
Revised Index	183.8	226.0	202.0	134.0	97.2	204.5	152.8	209.7
* Ice grouped with "other fuels" prior to 1948.								
* BLS officially estimates the over-all cost-of-living index on the old basis is 1.3 points too low and the rent index is 7.1 points too low. The error has been accumulating since 1940. The reason is that the BLS index hasn't been reflecting the higher level of rents charged for new dwellings.								
Source: U.S. Bureau of Labor Statistics.								

BUSINESS WEEK

C of L=Pressure on Truman

Price rise makes it more urgent for government to settle up with labor in defense program. It pushes many escalator wages through Johnston's wage ceilings and threatens strikes.

This week the Bureau of Labor Statistics announced that the cost of living had risen another 1.4% in the past month. That fact substantially increased pressure on the Administration to find a way to get along with labor in the mobilization effort.

• **Double Effect**—The increased cost of living had two direct effects on the relations of the Administration and Defense Mobilizer Wilson with organized labor:

- Wage contracts based on the cost of living—notably the agreement negotiated at the White House and covering more than a million nonoperating rail employees—now call for wage payments well above the permissible limit of present policy.

- The union argument that there is unequal sacrifice-free-moving prices and juicy profits while wages are being

held down—seems to be strengthened.

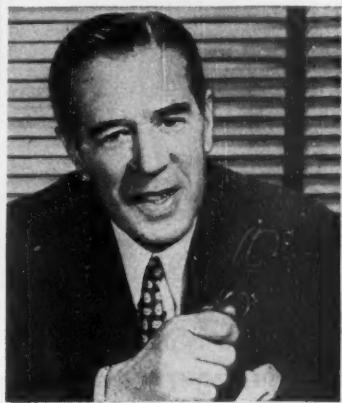
Under the rail agreement, nonoperating railroad workers are due to get a 6¢-an-hour boost on Apr. 7. Of this, 4¢ is above the ceiling set by Economic Stabilizer Eric Johnston. Yet the agreement was signed in the White House under John Steelman's aegis. He brought the negotiators a blessing-by-proxy from Harry Truman. If the rail unions did not have a commitment that their contract was solid, they were less hard-headed than anyone had reason to believe. Should Apr. 7 arrive without the railroads getting authorization to pay the added 6¢, a rail strike is virtually sure.

Only slightly less urgent than the rail wage situation are similar uncertainties in meat packing and shipbuilding. Unions in the stockyards and shipyards have negotiated agreements calling for

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There are many ways in which the local knowledge of Marine Midland banks can help you when your company has an account with The Marine Midland Trust Company of New York.

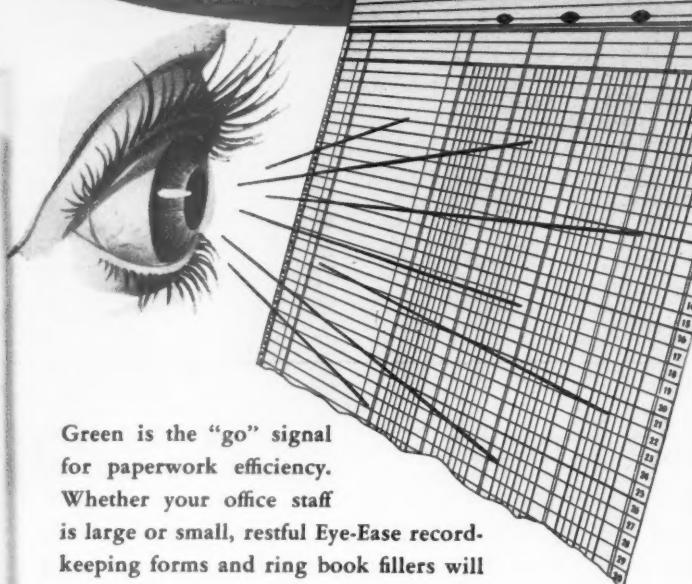
The officers of Marine Midland banks that serve 49 New York State communities know local industry, business and people. Let us show you how you can benefit from this knowledge in your day-to-day business.



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wage payments greater than Johnston's order now allows. He is on notice to approve them or face up to strikes.

• **New Rules**—The reality is that the Administration is practically sure not to let these strikes occur. Averting them will require, if not new wage rules, at least new interpretations of present orders. It's a job that Eric Johnston has been shunning like the plague. It will be handed to a new Wage Stabilization (and labor-disputes-settling) Board, the creation of which marks a turning point in national economic policy.

Up to this point, Washington has hoped it could maintain wage control until price stabilization was achieved. With prices stabilized, wage control would be a lot easier. But the slackening of price rises remains a hope for the future. And without such support, wage control cannot be made to stick.

• **Labor Unity**—The fact that labor is far from being inarticulate in pursuing its interests makes uneven stabilization much shakier. Last week, for example, the AFL and CIO buried differences that had kept them from holding a joint meeting for 16 years to stage a protest rally in Washington (BW-Mar. 17'51,p132). Their distaste for stabilization policies and Charles E. Wilson's independence forged the two labor factions into an unprecedented unity. The political implications were not lost on the Administration.

Nor, it was clear, were they lost on the participants. Both CIO president Philip Murray and AFL president William Green envisioned a merged labor movement and made a thinly disguised bid for its leadership. Murray, sure of CIO support, addressed himself to the AFL representatives present. His speech was comparatively moderate—attuned to what are assumed to be the conservative predilections of the AFL.

Thus he did not even mention Wilson by name. His strongest point was delivered in these words: "I hope

**Background figures for
BLS' revised index**

	Total Cost of Living	Food	Cloth- ing
January, 1950 ..	168.2	196.0	185.0
February	167.9	194.9	184.9
March	168.4	196.6	185.1
April	168.5	197.3	184.9
May	169.3	199.8	184.7
June	170.2	203.1	184.6
July	172.0	208.2	184.5
August	173.4	209.9	185.7
September	174.6	210.0	189.8
October	175.6	210.6	193.0
November	176.4	210.8	194.3
December	178.8	216.3	195.5
January, 1951 ..	181.5	221.9	198.5
February	183.8	226.0	202.0

BUSINESS WEEK



Now...tracking down hidden temperatures is simply a push-button operation

You'd hardly think a little thing like expansion could be so troublesome and costly in stored petroleum products. Yet temperature changes cause a change in volume that can amount to thousands of gallons annually, even in one tank.

When oil is sold from one of these tanks its average temperature must be known in order to compute the true amount. But accepted methods of checking temperatures leave much to be desired. Even in heated tanks, temperatures are far from uniform. The oil is cold below the coils, hot around and immediately above, progressively cooler near the top. To obtain an average, a gauger had to climb the tank in all kinds of weather, and spend up to an hour taking dip-cup thermometer readings at many levels.

Even with great care, this method could introduce errors in volumetric calculations amounting

to hundreds of barrels per tank. Needed: an instrument to instantly indicate true, average temperature throughout the liquid.

Representatives of a large oil company brought this problem to Weston engineers. In answer, they developed a special resistance thermometer, with temperature-sensing elements extending down through the oil. Now Weston meters mounted outside the tanks give accurate, *average* temperatures at the push of a button.

The same direct thinking and sound engineering that tracked down these hidden losses are available at Weston to help solve measuring, recording or controlling problems whether involving electricity, light, pressure or temperature. Weston Electrical Instrument Corporation, 580 Frelinghuysen Avenue, Newark 5, N. J., manufacturers of Weston and TAGliaue instruments.



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Clary Multiplier Corporation
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San Gabriel, California

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that the gentlemen in the Office of Defense Mobilization will redress the wrongs that have occurred. Even more, I hope that they will come to understand what all this unrest is about."

• **Aimed at CIO**—Green, on the other hand, set his cap and his rhetoric for the CIO section of the audience—on the assumption that they wanted redder meat. He thundered: "Behold the picture! At the top of the structure sits the one-man czar of the defense program, Charles E. Wilson, ex-president of the giant General Electric Corp. Beside him are two hand-picked corporation directors to carry out his bidding. Beneath them are ranged lesser business executives, each one chosen from a particular industry to make defense policies affecting that industry."

Of greater significance, however, the AFL-CIO meeting was really aiming over Wilson's head—at the Truman Administration. Wilson, DiSalle, Truman's advisers, and the union officials are agreed on one point: A prime source of trouble is the Defense Production Act, the basic statute from which mobilization and stabilization authority derives. All concerned want Truman to get the law changed so that prices can be controlled more effectively.

• **Sharing Discredit**—Labor will not settle its fight with Washington by accepting more generous wage rules and returning to membership on a wage-and-disputes board. It will not even make an armistice in return for getting representation on Wilson's top staff level. These things it will take without abandoning the position it is bidding for as spokesman and defender of the consumer. The unions fear that if they resume collaboration with mobilization and stabilization officers they will share the discredit resulting from failure to halt price rises.

To protect themselves, they will get back into bed with the Administration but only to play the role of nagging wife, warning everyone to expect the worst of the dissolute husband and prepared to say "I told you so" when the worst occurs.

No Left Turn at Ford

Communists and their followers last week hailed election results at the Ford Motor Co. as a significant swing to the left in the United Auto Workers (CIO). On the surface, the claim looks solid. But it isn't.

Carl Stellato, incumbent right-wing president of the 65,000-member Ford Local 600, barely nosed out Communist-backed Joseph Hogan 16,664 to 16,188 in a runoff poll. But the heavy opposition vote was more anti-Stellatoist than it was pro-Communist.

Makeup of the new executive board is top-heavy in favor of the right wing.

THE LABOR ANGLE

Union Security: I

THE NEXT BIG issue in labor relations is an old one revived. Its generic name is "union security." It reaches new and compelling importance now because (1) a long-term trend is coming to a climactic point; (2) some strange fruits of the Taft-Hartley act are being harvested; and (3) mobilization pressures are upsetting the always delicate equilibrium of the union-management balance.

The advent of this new stage in the battle over union security can alter the basic power factors in the union-management equation—unlike the ordinary controversies over wages, hours, or even fringe benefits and pensions. The outcome of the union-security battle has a well-nigh permanent effect on the labor-business competition.

THIS IS REASON enough—although there is the additional fact that many employers will be directly involved in negotiations over union security—to review the union-security problem and appraise the setting in which it now arises. We go back a long way to get it into its proper perspective.

The most primitive form of union security is the union itself. The strike predates the union in history. Men, tried beyond endurance by some oppressive practice, left their workplace before unions existed. When they ran out of money, or when their absence induced their employer to rectify their grievance, they returned to work. Once more they became a collection of separate, nonorganized individuals—until some common suffering knit them together all over again in a joint protest.

The fact that an ad hoc organization had to be improvised for each new act of protest made it difficult to act quickly and effectively. Also, because no organization existed between strikes, it was possible to win some concession by a walkout only to have it taken away by the employer after the strike was over.

THEFORE UNIONS came into being. Their purpose was to keep the group solidarity alive

between strikes, see that strike gains were not lost, and have an organization ready for future strikes. Thus the essence of union security—compact and complete unity of workers—was to be provided by the union itself.

BUT, IN AMERICA at least, the unions failed to build security just by offering a going organization to employees. The national distinction is significant because it points up a development unique to the American scene. In other nations where unions became economically important, they had no need to fight for making union membership a condition of employment. They needed no such bulwark. The class-consciousness of the workers there gave the unions the solidarity they needed. Here, however, the workers showed a tendency to become union members only when they wanted some specific benefit from organization. After they got it, they would drift out of the union.

Hence the organizations of labor in this country, very early in their existence, developed the concept of the closed shop. Its purpose was to take control of the job and job opportunity away from the employer and away from the individual worker and give it to the organization. Accomplishing such an objective gave the unions a power of discipline over individual workers. The workers could work only under rules set by the union group, had to be loyal adherents of the group's policies, etc. This also enhanced the unions' bargaining strength in dealing with management.

Management resisted the imposition of the closed shop, understanding it as a curtailment of management authority. So the union drive for job control in the face of employer opposition has made union security an embattled issue for generations.

The forms of compromise that have been worked out in that struggle and the sharpened focus into which the battle now moves will be the subject of the next Labor Angle.



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Mon-Con Peace

Jones & Laughlin reopens as Army ends rail strike. Senate probes apparent breakdown of railway mediation methods.

The Monongahela Connecting R.R. was rolling freight in the Pittsburgh area again this week. An Army-directed settlement ended a long wage dispute. The short-haul carrier, a subsidiary of Jones & Laughlin Steel Corp., and the Brotherhood of Railroad Trainmen accepted the Army's terms: a 12½¢ hourly wage boost.

• **Mills Reopen**—Resumption of operations on the railroad brought a quick reopening of J&L steel mills—closed for two weeks due to Mon-Con hauling difficulties.

The Army—which had seized the Mon-Con along with other railroads during the 1950 rail labor crisis—intervened after the company-BRT dispute closed J&L.

The 12½¢ raise is about the amount of Mon-Con's last offer to BRT. The union cut its 35¢ demand to 12½¢.

Unions representing some 1-million nonoperating railroad workers negotiated a similar 12½¢-an-hour settlement with carriers in February.

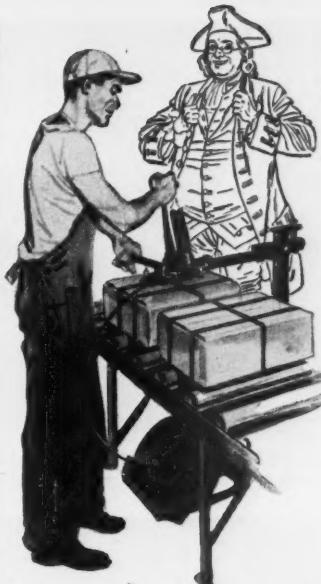
• **Probe On**—Meanwhile, the Senate Labor Committee continued hearings last week on reasons for an apparent breakdown in Railway Labor Act procedures (BW-Feb. 17 '51, p107). The committee wanted to find out, in particular, what happened to a prematurely announced settlement of a dispute between carriers and four major operating brotherhoods last year.

The committee showed a lot of interest, last week, in one question: Should strikes be prohibited on the railroads, and compulsory arbitration required?

The "settlement" worked out in the White House last December called for compulsory arbitration of all unsettled rules disputes.

Specifically, it said: "If the parties cannot agree on details of agreement or rules, they shall be submitted to John R. Steelman (Presidential aide who helped draft the terms) for final decision." Brotherhood negotiating committees balked at that.

• **Murray Proposal**—Later, Sen. James E. Murray, chairman of the committee, proposed terms essentially the same as the ones proposed in the White House in December—except for the elimination of compulsory arbitration through Dr. Steelman. The brotherhoods expressed an interest in the proposal; carriers, however, said it wouldn't be acceptable.



"The eye of the master will do more work than both his hands."

—Ben Franklin's Almanac, 1757

Touring thy plant with a critical eye can do more for the health of thy business than a trip to Washington.

—Acme Steel Notebook, 1951



Your management eye needs to be a dozen places at once these days—on supplies, on production, on deliveries, and all over your plant to keep efficiency high and morale up.

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COMPANY CONFERENCE in an Illinois State Chamber of Commerce slide-film takes up the question of whether Negroes can be integrated with other workers.



IN STORE AND OFFICE, customer and work relations are involved. The chamber found the Negro salesgirl (left) and clerk (right) work out well at Carson, Pirie, Scott.



AND IN WORKROOMS, such as B. Kuppenheimer's, the Negro machine operator has now been accepted by other employees on the basis of her ability.



IN COMPANY LUNCHROOM, Negroes have to mingle socially with other employees. A state chamber survey found that it's been done without trouble in 71% of cases.

"It's Good Business"

Illinois Chamber of Commerce starts educational drive to head off a state law barring discrimination in hiring. Movies, conferences, training schools, counselling services will be used.

"It's good business to hire minority-group workers," the Illinois State Chamber of Commerce has told businessmen from 16 northern Illinois counties. That was the theme of the opening of a two-year educational drive against job bias—a drive aimed to reach the men who do plant and office hiring.

Opposed to Law—Early this year, the state chamber realized that unless business and industry voluntarily set up a concrete antibias program, the state might force them into one. A law barring discrimination in hiring—strongly opposed by the chamber for five years—might be pushed through the legislature.

The state chamber started off with a careful study of experiments with voluntary methods in other states and cities—especially in Cleveland, which had a comparable situation. About two years ago, Cleveland's chamber of commerce led a business-sponsored drive to head off a threatened city anti-discrimination ordinance (BW—Apr. 30 '49, p.106). It delayed city action for a while, but eventually the ordinance passed.

Next, the Illinois chamber checked a representative list of companies, found that 70% favored a chamber-sponsored education campaign.

With this strong backing, the state chamber pressed on with plans for a four-point antibias drive. Plans include:

- Regional conferences for top management and personnel people, to discuss successful integration of minor-

ity workers into business and industry.

- Training schools to give lower-level personnel people the background and technical knowhow necessary for running a successful program.

- A counselling service to help employers with integration problems, and to assist in the procurement and placing of qualified minority-group workers. The American Friends Service Committee (Quakers) and National Conference of Christians & Jews will cooperate in this.

- A clearinghouse for assembling and distributing experiences with minority-group employees.

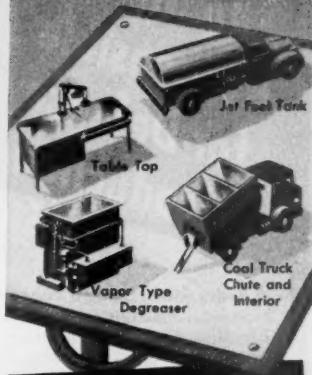
The chamber prepared a 35-min. sound slide-film as an interest-raiser. The film ("It's Good Business") made its public debut at the chamber's first regional conference two weeks ago. Aimed particularly at businessman audiences, it avoids sentiment and flag-waving propaganda, sticks to solid, rational arguments for ending job bias.

The film "plot" involves the reluctance of an imaginary company's lower-level executives to hire minority-group applicants. The personnel people argue that these groups aren't so efficient and dependable and that other employees won't work with them.

The company president calls a conference (picture, page 38) to dig into all angles of the problem. He gets expert help from:

- Scientists, who refute charges that one group is inferior to another.
- Businessmen, including Inter-

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national Harvester's John L. McCaffery, who testify that minority workers are as efficient as any, and can be successfully worked into the office or plant force.

• Labor leaders, educators, churchmen, and racial-group leaders, who point out that many minority-group workers already contribute heavily to business and civic life—but that the talents of many others are being wasted.

Finally, the film shows Negro workers employed successfully with white employees in representative Illinois companies—among them, International Harvester; B. Kuppenheimer & Co.; Alden S. Carson, Pirie, Scott & Co.; Illinois Bell Telephone Co., and Commonwealth Edison.

The windup? The company decides to employ minority-group applicants on the sole basis of ability.

• **No "Commercial"**—Although the film is intended mainly to set the stage for the chamber's conferences and training sessions, it won't be limited to such a use. The chamber plans to release the film, free of charge, to other organizations interested in fighting bias. For that reason, the chamber didn't include a "commercial" advocating opposition to an antibias law.

The fact that the film doesn't take sides delights proponents of an FEPC-type law in Illinois. They feel the film, if widely shown, might have the unintended effect of strengthening their cause.

• **Social Problem**—The chamber knows that getting a job for a minority-group worker is just part of the problem. So practical training and counselling programs will be slanted toward social problems that might come up in office or plant.

For that reason, a 95-man committee from the chamber contacted 300 top executives in a predrive survey. It asked such things as:

Do you hire Negroes and other minority-group workers, and in what capacity?

Has the employment of colored personnel created any problems among other employees?

The answers were illuminating. For instance, 43% of the companies surveyed employ Negroes—but only 13% let them hold skilled or semiskilled jobs in plants; only 19% gave them clerical jobs.

Of the 43% that employ Negroes, 84% do not segregate them in any way in work space, locker rooms, or restaurants. And, almost unanimously, the companies reported the Negro workers perform as satisfactorily as any others.

• **Some Friction**—There's some friction, now and then. Of the companies employing Negroes, only 71% could report "employment of colored personnel

along with white has created no friction." But, said the chamber, the 29% who reported "mostly minor" troubles was "a lower index of difficulty than we had expected to find."

Troubles most frequently mentioned involved: refusal to work alongside colored personnel; internal segregation practices set up by workers themselves; locker room friction; and short strikes or concerted quits.

LABOR BRIEFS

Novel clause in a contract between Southern California Edison and CIO utility workers ties pay raises to the government's wage policies. Pact gives an average 10% raise now, binds company to give up to 3% more whenever current federal curbs are eased.

Hiring hall and wages will be issues in coming contract talks between West Coast shippers and leftist longshoremen and seafaring unions. Negotiations can start any time after Apr. 15. Unions say they'll stand pat on demands "even to the extent of coastwide [strike] action" after June 15.

CIO got a setback in Montana last week at the hands of the leftist Mine, Mill & Smelter Workers (ex-CIO). MMSW won a union-shop authorization in Anaconda copper mines by a 9 to 1 vote. CIO's United Steelworkers urged a "no" vote as a protest against MMSW.

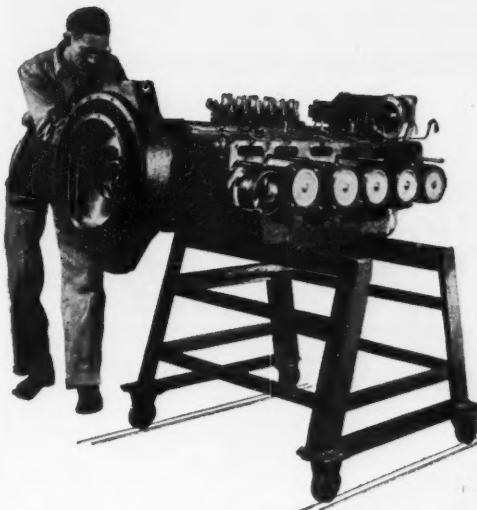
Doubling up on jobs is common practice for about 3% of those employed, the Census Bureau reported recently. A survey showed that, of 61-million employed, 1.8-million held two or more jobs. The figure includes those self-employed in secondary jobs, but not domestics.

Beauty workers—including wig makers, lipstick moulders, and moustache-wax blenders—employed by Max Factor & Co., Hollywood, rejected AFL's teamsters 207-98 in an NLRB election.

Police unionization is the goal of CIO's Transport Workers Union in New York and in Philadelphia—where TWU is firmly established in transit systems. If drive is successful in test cities, TWU will expand organizing work.

Longer contracts are the rule now, as compared with pre-Korea, according to the National Industrial Conference Board. Before Korea, only about 3% of contracts checked by NICB ran three years or more; since mid-1950, 10% run for three years, and 6.6% for five years.

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HISTORY

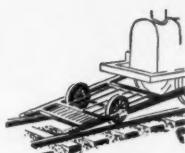
Business has made contributions like these to the American language:



Highball



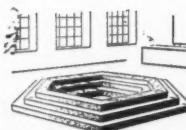
Rubberneck Wagon



Cowcatcher



Gin (sense 2)



Pit on an exchange



Carpet Sweeper



Typewriter



Pepperbox



Baby Carriage

America Has a Word for It, Too

As far back as 1856, Americans were getting things "all balled up"; since 1865, some of us have been "mean enough to steal the coppers off the eyes of a dead man"; and in 1926 the New Republic congratulated the motion picture industry on what the New Republic called its greatest contribution to contemporary thought—the invention of the phrase "sex appeal."

In 1785 Americans christened a boat

propelled by steam a "steamboat"; along about 1868 a new contraption for writing by means of type characters was named the "typewriter"; and by 1847 "sewing machine" was becoming a household word.

These are samplings of new words and word meanings contributed by Americans to the English language. They come from the two-volume, 2,000-page, Dictionary of Americanisms,



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Gear your production schedules with the dependable performance of B&O's Time Saver Service. A streamlined LCL operation that provides *Sentinel* dependability and saves $\frac{1}{2}$ or more shipping time!

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The Man of Decisions *the Chief Inspector*

The product you ship is as good as the standards set by its producer. That puts it up to the Chief Inspector (or maybe you call him the Inspection Manager) to see that the manufacturer's standards are maintained so customers can rely on the quality claims that are made. Much credit for the reputation that a product enjoys can be traced to the fidelity of the Chief Inspector in interpreting the customer's requirements so far as the quality of the product is concerned.

Failure of products to pass inspection during production sometimes leads to changes of ingredients and even equipment.

A good Chief Inspector allows none but good products to leave his plant.

Unless a manufacturer is indifferent toward his customers' interests and has no thought for the satisfaction he delivers or for the future of his business, he certainly makes it a point to see that the materials he uses to build his product have a history of good performance.

If tubing, for instance, is a component of his product, he can feel very confident that it will perform most dependably if he uses Wolverine tube. This tube has an enviable reputation for quality; it is made as good as expert skill and several decades of experience can produce it. There IS a difference in tubing, you know.

Change to Wolverine tube if you're having trouble with tubing in your plant.

WOLVERINE TUBE DIVISION—Calumet & Hecla Consolidated Copper Company, Inc., producers of quality-controlled tube for refrigeration, processing industries, plumbing, heating and air-conditioning, automotive and aviation—1469 Central Ave., Detroit, Mich.—Plants in Detroit, Mich. and Decatur, Ala.



There IS a difference in Tubing

published this week by the University of Chicago Press.

• **All-American**—This is the first historical dictionary devoted exclusively to words and word meanings that originated in the U.S. Its editor, Mitford M. Mathews, and his staff spent more than five years running down the first-known printed evidence for each of the 50,000 Americanisms included in the dictionary.

• **Business Language**—According to the dictionary, business and industry rank second only to the frontier as a source of new words. Almost every time Americans have invented a new machine or device, or turned out a new product, someone had to invent a name for it.

• **Aid to Informal Relations**—In addition to being a treasure trove of word derivations, the dictionary has some practical uses for business. It could be a big help in employee communications programs where the stress is on earthier, more vivid language. The executive preparing company bulletins, letters to employees, or supervising a house organ will find it a rich source of sharp, effective word images.

• **Coverage**—The two volumes include words coming into the English language first in the U.S.; words old in the English language, but which have acquired new meanings in this country; terms first appearing in America but made by combining older terms; phrases coined in the U.S.; American nicknames; and slang expressions that have become very well established over the years or possess certain historical significance.

The first historical dictionary ever to be illustrated, it contains over 400 line drawings of early models of American objects whose names have found their way into the language. The two-volume set sells for \$50.00.

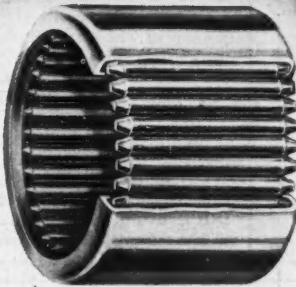
• **Examples**—One of the earliest American inventions to contribute a word to the language is "steamboat." First example Mathews found of the word was in 1785, in a reference to an unsuccessful predecessor of Robert Fulton's Clermont.

"Mowing machine" first appeared in 1823, followed by "binder," and Cyrus McCormick's "harvester."

The great era of canal digging and road building in the early part of the 19th century called for the invention of a machine to move dirt quickly and easily. The first machine to do the job was called an "excavator," in 1843. By 1879, "steam shovel" replaced it in the language.

Mathews found the earliest possible use of the word "typewriter" in the patent application of its first inventor, Sholes, in 1868.

The name "sewing machine," for what is probably the widest-spread American invention, came into the lan-



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Wickwire Rope engineers and distributors will help solve your wire rope problems.

LOOK FOR THE YELLOW TRIANGLE ON THE REEL

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PACIFIC COAST SUBSIDIARY—The California Wire Cloth Corporation, Oakland 6, California

guage in 1847, after Elias Howe perfected the first practical one.

"Refrigerator," an old word, acquired a new American meaning to describe a boxlike device using evaporation and ice to maintain a temperature low enough to preserve food. The first refrigerator, Mathews found, was invented by a Maryland farmer named Thomas Moore in the early 19th Century. The first-known appearance of "icebox" was in 1846.

Railroads have contributed such colorful terms and words as "cowcatcher," "locomotive," "gravy train," "conductor," "brakeman," "observation car," and "highball."

• **Trademarks**—Manufacturers' names and coined trademark names for new American products account for many Americanisms. Their inclusion in the dictionary by editor Mathews is based on the length of time they have been in everyday use and on the evidence of their use.

One of the earliest of such trade names is "Colt," first used in 1838 for the firearm invented by Samuel Colt. "Pullman," named after its inventor George Pullman, appears in 1870 as the name for a railroad sleeping car or passenger car.

"Celluloid," the trademark for an artificial substance with a cellulose base that is used in place of ivory, coral, etc., in the manufacture of small objects, is first mentioned in 1871; "Vaseline," the trademark name coined for semi-solid yellowish-white petroleum product used as an ointment by Robert A. Chesebrough, first made its appearance in 1874.

"Coca-Cola" and its nickname "coke" are listed for the first time in any dictionary. First-known use of "Coca-Cola" in print was in the Atlanta Evening Journal in 1887 where, in a one-column ad, the drink was described as "the brain tonic and intellectual soda-fountain beverage, recommended by all who have used it." First evidence of the use of its nickname "coke" dates back to 1909, when the editor of the Coca-Cola Bottler reported the use of a sign outside of a general store that read "Ice Cold Cokes Here."

"Malted Milk," the dictionary shows, was originally a trademark name coined and registered in 1887 by William Horlick for a powder made of evaporated milk and malted cereals. "Kodak" was coined as a trade name by George Eastman in 1888 for a small camera made by the Eastman Kodak Co.

Among later trademark names listed in the dictionary is "escalator," first used in print in 1900 as a trade name for a continuous moving stairway built by the Otis Elevator Co. for the Manhattan Elevated Railway.

The "Stetson" hat got its name from its designer, John B. Stetson, about

1865. First-known appearance of the word in print was in 1902.

The "Stillson wrench," now a name for all pipe wrenches of the same type, was named for its inventor, Daniel C. Stillson, in 1869. What is known as the "Genuine Stillson," with the diamond trademark and the name Stillson on it, is still made only by the Walworth Co. of New York.

"Victrola," first the trademark name for the phonograph made by the Victor Talking Machine Co., and first used in 1917, became the name commonly used for all phonographs. "Dictaphone," 1907, and "mimeograph," 1889, both trade names originally, suffered the same fate.

Another manufacturer's name that has found its way into the language as a general name is "levis," meaning bibless overalls made of heavy denim reinforced at strain points with copper rivets. The name originally was the trademark of Levi Strauss, a pioneer western overall manufacturer.

• **Finance, Too**—Finance is responsible for another group of distinctive American words and terms. Among them: "due bill," whose first-known use was in 1792; "check," 1809; "gold standard," 1831; "to sell short," 1852; "multimillionaire," 1858; "pit" and "tycoon," 1886; "escrow," 1888; "big business," 1905; "short change," 1908; "blue-sky law," 1912.

Got a House Printer? Western Union Asks

Got any old telegraph equipment stored away in your attic? Take a look; and if you find a House telegraph printer, let Western Union know.

Western Union has been combing the country for one of the century-old machines, to use in its centennial celebrations on Apr. 1. So far the company hasn't been able to find one, though hundreds used to be in service before and during the Civil War.

The House printer was the first telegraph machine to print Roman letters, numerals, and punctuation, instead of code. Old prints show that the machine had a keyboard like a piano: you stuck the telegram in the "music rack," then played it into the machine.

• **Ultra Poor**—The printer had quite a history. Royal E. House, the Vermont farm boy who invented it, was so poor he slept under his lathe—on account of no bed. House exhibited the first complete printer in New York in 1884. It was an immediate sensation, although old Samuel F. B. Morse sneered at it.

House was so afraid of industrial piracy that he had different parts of the machine made by different firms; none of them knew the whole mechanism.

Stepped up... from WEEKS to MINUTES!



Federal technician measuring temperature of internal thermocouples during heat test on Flexunit Panelboard

YOUR ELECTRICIAN, until recently, has had to order power distribution panelboards directly from a manufacturer. Each panel was custom-built to individual specifications and deliveries, if long delayed, were costly. Within the past year, however, Federal Noark has made it possible for electricians to meet practically any distribution panelboard requirement at a moment's notice.

Remarkable new Flexunit Panelboard

Underwriters' Laboratories, Inc., requires that panelboards pass stringent tests for such factors as heating, wiring space, spacing between live parts, and dielectric strength of insulation. With the development of the Flexunit Distribution Panelboard, Federal Noark became the first manufacturer to produce a full line of Underwriters' approved *panelboard components* that can be stocked by jobbers and sold by them to electricians for assembly into complete boards in a matter of minutes! Importantly too, Flexunits readily permit subsequent change of any circuit from one rating to another, and the quick addition of extra circuits.

Federal Plants from Coast to Coast

The Flexunit Distribution Panelboard is only one of a dozen Federal Noark developments of outstanding value to electrical jobbers, contractors and plant maintenance men. And leadership in the design and manufacture of control equipment has brought Federal a phenomenal growth. From Connecticut to California, five large Federal plants are today operating at full capacity to meet the call for Federal Noark products.

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PRODUCTION

How TV Makers Save Material

By substituting less critical metals and making parts smaller, set makers will keep up production. But quality will suffer, and costs will be higher.

TV sets will continue to come off production lines next year and the year after, in spite of defense demands on electronic equipment. But they will be down in quality and probably up in price.

• **Look Inside**—They won't look much different, on the outside at least; they will have the same mahogany finish and flashy plastic knobs. But the works inside will be radically different. Bit by bit, video makers are picking the bones of their sets clean of critical materials and parts. The more replacements, the more revisions that manufacturers make to save materials, the more they will have to sacrifice on performance and costs.

The materials shortage centers on metals mostly, though some plastics are getting scarce, too. Most critical is the shortage of cobalt, nickel, and copper; these metals are essential in magnetic and electronic circuits, and they're all on allocation.

The industry actually felt the pinch on materials even before Korea. Small parts such as resistors and condensers were getting scarce this time last year; lots of military surplus electronics gear was selling at fancy prices to be dismantled for use in civilian equipment.

• **Defense Strain**—Now military needs are straining that already short supply to the limit. Planes, ships, and tanks take a lot more electronics gear today than they did in the last war. The electronic equipment that goes into a present-day medium bomber costs as much as the whole bomber did during World War II.

You get some idea of the extra load the industry will have to carry when you compare an estimate of this year's dollar volume production of civilian TV sets and radios with military demand. The industry will turn out about \$1.4-billion worth of TV sets and another \$375-million worth of radios. On top of this is a staggering \$2-billion in defense contracts.

This isn't quite so rough as it looks. In the first place, the military orders will be spread over several years. Secondly, much of the expense of military electronics gear is in manpower, not materials. Five or 10 dollars' worth of military equipment might have the

same amount of stuff in it as one dollar's worth of television.

• **Manpower Problem**—The difference comes in the extra attention in design and construction of units like radar and field radios. They have to be soldier-proof in the field. It takes more man-hours to make a radar tube—which is nothing but a steel casting made to high tolerances—than a TV picture tube.

Manpower is going to be a major problem for the electronics manufacturers as soon as they really get rolling on military orders. But right now, in the transition period between civilian and military production, some manufacturers are actually troubled with a manpower surplus. Rather than reduce its personnel until it gets enough government contracts to fill capacity, DuMont has put its East Paterson (N. J.) plant on a four-day week.

• **No Major Revamping**—Right now, TV makers are beginning to economize on materials in the auxiliary sections of their sets—the components that don't directly affect the quality of the picture. But as they get closer to the video circuits, they must gradually lower the performance of the sets. A TV maker can't eliminate a part or a circuit here and there or make a dual-purpose tube do the work of two separate tubes. Compared to an ordinary radio—which was pared down to the simplicity of a crystal set during the last war—a television set is a pretty finicky piece of electronics. Once a practical design is built into a workable model, it won't stand much revamping. A switch from a low-resistance copper wire to a higher-resistance steel wire in a circuit might change the scene on the picture tube from a trained seal act to a rather pleasant white blur.

• **Substitutions**—So far the industry has used two approaches in conserving critical metals: substituting less critical metals, and making the parts smaller. Already the ideas have paid off with impressive savings in materials. The chassis of Philco Corp.'s new austerity set eliminates cobalt entirely and reduces aluminum by 68%, copper by 26%, and nickel by 15%.

Philco figures that if such conservation had been in effect during 1950

the industry as a whole could have saved 440 tons of cobalt, 2,100 tons of aluminum, 4,600 tons of copper, and 224 tons of nickel.

The coatings for the chassis are also going through a few changes. Cadmium plating has been replaced with zinc plating. Now that zinc is scarce, Philco is trying to develop a plastic or paint coating for the metal bases. But unlike zinc, plastic would not conduct electricity, and so certain spots on a chassis would have to be left uncoated to allow for soldered connections. That means that the uncoated spots would have to be treated for rust-resistance to keep the connections clean.

• **Smaller Parts**—Smaller parts also mean less critical materials. Without touching the works of their TV sets, manufacturers are decreasing the size of components such as speakers, transformer cores, and coils. Philco has eliminated Alnico magnets made from aluminum-nickel-cobalt alloys by using a smaller electromagnetic speaker. The amount of wire used in the output transformer of the speaker was also cut down and a special compensator installed to keep up the quality of the sound.

• **Replacements**—Hardest of all to tackle are substitutes of one type of part for another. The replacements involve mostly components, not the circuits in a set that make the picture. In its austerity set, Philco scrapped a high-voltage transformer and its rectifier tubes for a couple of selenium rectifiers that use a voltage doubling circuit. The new circuit cut out one filter condenser that used a lot of aluminum foil and reduced the foil demands of other condensers.

But replacements like these are usually more costly than the original designs of the circuits. Fabric straps that have replaced aluminum straps on picture tubes require riveting. That costs more. A less critical plastic insulation cup for a tube needs an expensive molding operation, while the aluminum cup it replaces is made from a simple stamping.

• **Subminiaturization**—When it comes to the guts of a video receiver, slight changes in its blueprint can blow up into big revisions in the construction of the set. For that reason, manufacturers are slow to make even the smallest design changes. When they do make them, they are usually radical in their effect.

One design angle that will eventually save hard-to-get materials is subminiaturization. Each tube circuit is built up as a tiny plug-in unit. Bendix Radio demonstrated the idea at the Institute of Radio Engineers' convention in New York City last week. One amplifier was as long as your forearm, had 204 precision-made parts in the original

• "you name it...I helped make it!"



Starch for sunbright sparkle

I can stick in my thumb. And pull out—a cherry! From a pie—with deliciously tempting color. Orchard fresh flavor that'll tantalize your tongue. How is it done? With fruit pie specialty starches! Fillings have a soft tender jell. A slight flow. Firm cut. Excellent clarity and stability. No cereal taste.

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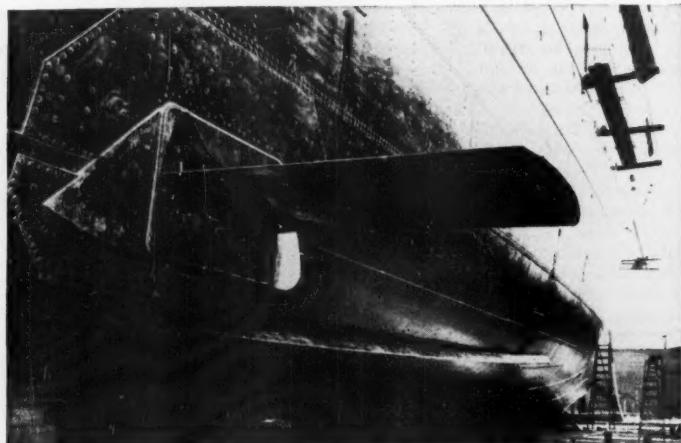


design. A similar unit that used subminiaturization had only 35 parts and fit in the palm of your hand. With components like these, tomorrow's TV set may be mostly picture tube with little else that you can see inside the cabinet.

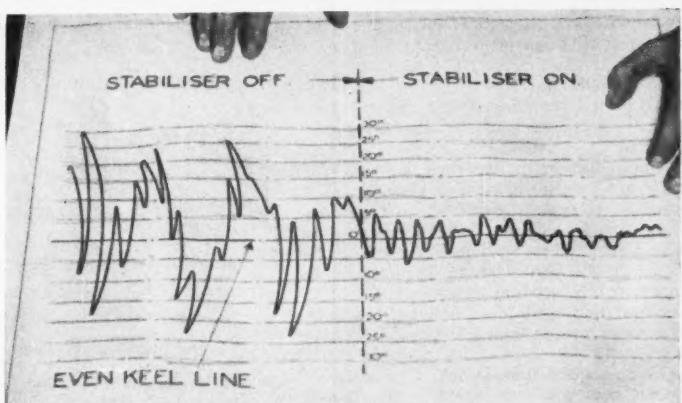
• **Rejects Retained**—"Save materials—save jobs," is the catchword of RCA's

employee campaign to save critical materials.

RCA's drive stresses the idea that the peacetime ratio of rejected parts to those that pass inspection can't be tolerated now that an emergency is on. Even some of the rejects are stocked on the chance that they will be fixed up and used later.



Retractable Stabilizing Fins ...



Keep This Ship on an Even Keel

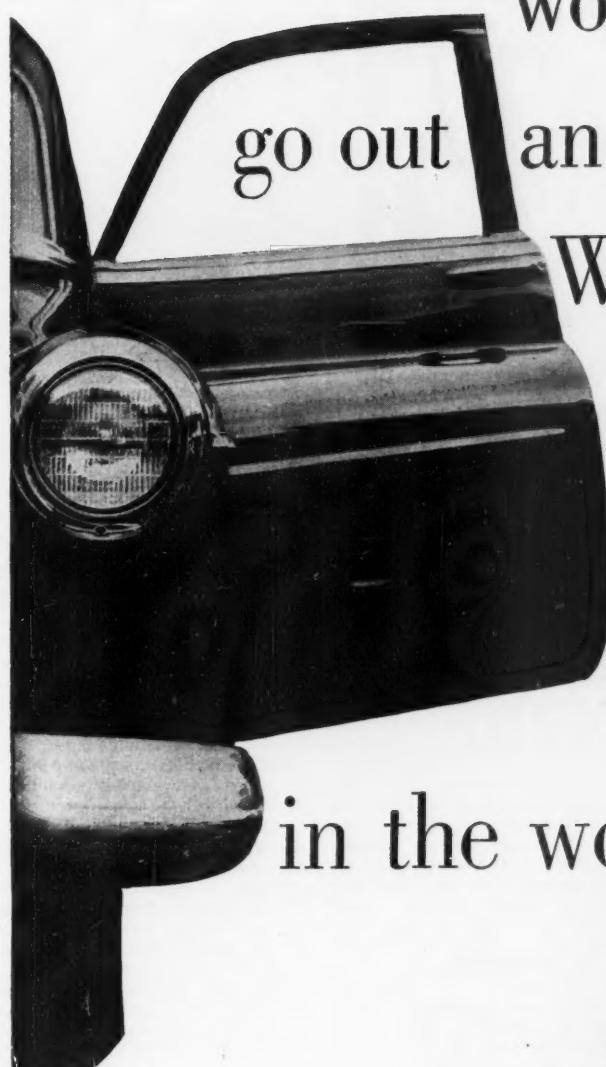
This isn't the Flying Dutchman. It's the British 24,000-ton luxury passenger liner R. M. S. Chusan, fitted with stabilizing fins to reduce ship roll. The device promises a new day for seasick-prone voyagers.

Royal Navy and Channel ships have used this type of stabilizer for some time—but only on ships of less than 3,600 tons. Now an ocean liner is getting the treatment.

The stabilizer has two fins, one on

each side of the ship. When the moving ship heels, the fin on the low side tilts so that its forward edge is up. Water pressure against the fin shoves the ship back to an upright position. Meanwhile, the fin on the upper side tilts so that its forward edge is down, and the water forces this side down.

In tests, the Chusan, steaming along at 19 knots, was heeled over 17 deg. The stabilizer killed the roll in six seconds.



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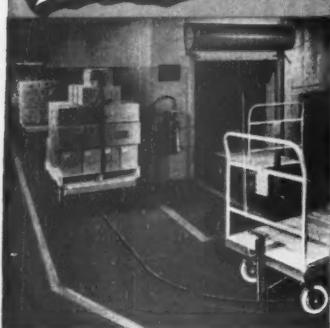
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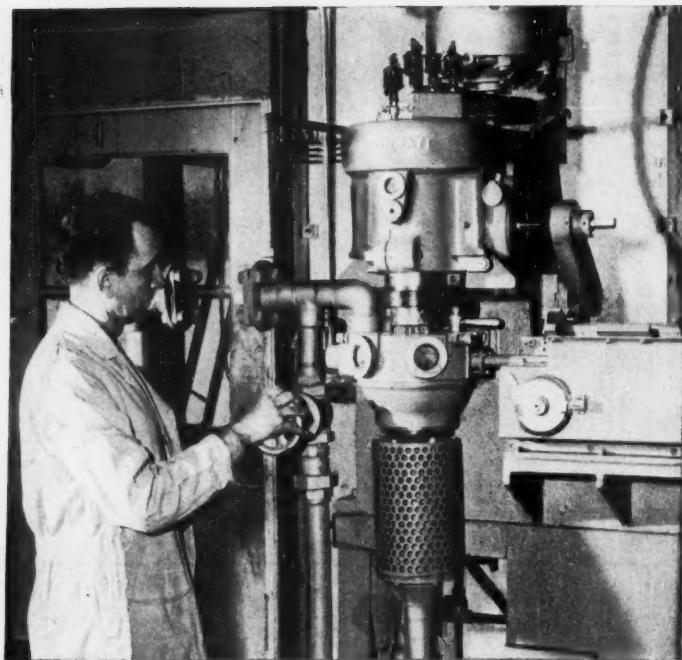
For a full description of the tow line conveyor and all its possibilities write for a copy of Bulletin TC-1.



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CIMMAC reactor chips metal into chemical bath (behind perforated shield).

Metal Chips Make Chemicals

Machine tool company found that coolant liquids went through chemical change when they hit a hot knife and metal. Now it has turned the tool into a reactor to make synthetic chemicals.

In the early days of movies, there was a real tickler of a cartoon that went something like this. A boy walks into the frame carrying a letter—a big letter about a block long and 10 ft. wide. He gets to the mailbox and puzzles for a while. Finally he rips open the envelope, tears the mailbox off its post, drops it in the envelope, and seals it up.

• **Tool to Reactor**—In a sense, that is what Cincinnati Milling Machine Co. has done. When it found out that its cutting tools were producing a chemical reaction in the coolant liquids, it put the machine tool inside a reactor and let it chew away to produce synthetic chemicals.

One day back in 1939 while they were doing some research on cutting aluminum, Cincinnati experimenters discovered that the coolant they were using, carbon tetrachloride, turned into aluminum chloride when it passed over the cutting knife. Some kind of chemical reaction was going on that looked interesting. But the war came along, and Cincinnati shelved the idea for the duration.

Two years ago the company bought Carlisle Chemical Works in Reading, Ohio, and turned the subsidiary to work on the problem. Today Carlisle Chemical is ready to sell commercial chemical reactors that it calls Cimmacs. Cimmacs produce chemical compounds by a process that has the advantage of strict control.

• **Control Problem**—Many processes for synthetics need the presence of reactive metals such as magnesium, aluminum, or sodium somewhere along the line to make them work. Margarine and cooking-fat makers, for example, use the catalytic effect of nickel to turn vegetable oils into creamy solids.

But many of these metallic-chemical reactions aren't easily developed and perfected by a chemist. They're often hard to start and, once started, tough to control. Worst of all, many of these reactions use ether or similar toxic, flammable solvents in batch processes. The bigger the batch the more the danger of fumes and fire.

• **How It Works**—Carlisle's reactor eliminates this danger and makes a

chemical reaction a thing that can be counted on.

The reaction chamber of the unit encloses a motor-driven cutter and a rod of metal that is mechanically fed to the cutter. The key spot is the tiny area where the cutting tool bites into the metal rod. Here the cutting pressure is incalculably great, the heat from the cutting is high, and the metal rod is freshly bared and stressed by the cutting action. These conditions combine to make the metal susceptible to chemical attack.

The chips that peel from the rod drop to the bottom of the reaction chamber where they combine with the chemical reactant. There's no excess metal to carry the reaction beyond the control point; the chips are used up as fast as they fall.

• Ready to Sell—During its recent developmental work, Carlisle has synthesized many chemicals on a contract basis. Now Carlisle is ready to design and sell commercial-sized reactors of any capacity. They are priced at \$3,000 and up, depending upon the size and complexity.

PRODUCTION BRIEFS

How much subcontracting? The Cleveland Ordnance District figures that \$95-million of its \$181-million worth of defense orders has been spread out among small manufacturers in the Cleveland area.

Tooling for the C-119 cargo plane has started at Kaiser-Frazer's Willow Run plant. Planes and autos will be built under the same roof.

A homemade Geiger counter can be put together from circuit diagrams—and production specifications, if you're commercially minded—available for 30¢ from Dept. of Commerce's Office of Technical Services, Washington 25. Ask for Document NYO-1538.

New asphalt roads from old are made by a continuous operation developed by Shell Oil Co. and Reclamix, Inc. Crushed asphalt from the old road feeds into a mobile road plant, is enriched with additives, and is relaid on the roadbed. The operation works on one lane, while traffic moves on the other.

Uses for atom byproducts in industry are being investigated by the Stanford Research Institute for the Atomic Energy Commission. The fission products, which are low-cost sources of radioactivity, can kill organisms, induce chemical reactions, ionize gases, or activate phosphors.

A QUICK ANSWER

TO U.S.

SPECIFICATION FINISHES
FOR DEFENSE PRODUCTS



It's this: Glidden Service . . . Glidden Finishes . . . Glidden Technical Assistance. All three are excellent reasons why it pays to come to Glidden first for the answer to *any* question involving specification finishes.

Backed by experience gained from two World Wars and close co-operation with Government agencies in times of peace, Glidden's vast research and production facilities are ready to work for you today. THE GLIDDEN COMPANY, Department W-3, 11001 Madison Ave., Cleveland 2, Ohio.

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TODAY!

An informative guide to help you in preparing your government bid in converting from civilian to defense product finishing, and in meeting government specification requirements. Write for your free copy.



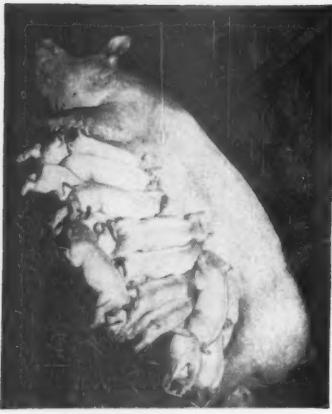
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Product Finishes



PAINTS • LACQUERS • ENAMELS • VARNISHES • PRIMERS AND SPECIAL-PURPOSE FINISHES



18 little Yorkshire porkers on the Maurice Cull farm, Jay County, Indiana, try to get up to the dinner plate

Pretty Picture

Midwest 8 States
Raise 57.2% of
Total U. S. Hogs

The size of the spring pig crop in the Midwest 8 states presents a pretty picture of your sales prospects in "the world's richest farm market."

Midwest farms raised more than 57,000,000 pigs, 57.2% of the U.S. total, last year. The department of agriculture forecasts a 4% increase in the Midwest's spring pig crop this year.

That's a lot of pork chops, and as they go to market it means a rich and ready market for what you have to sell farmers. Concentrated one-package coverage of the Midwest farm market is available to you through the Midwest Farm Paper Unit—one order, one plate with a substantial saving in rates.

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San Francisco . . . 1324 Wilshire Boulevard, Los Angeles.

Automotive Arithmetic

New lab at Wayne University aims to provide calculators for auto industry design. Auto companies will cooperate to get computers that will speed research and production.

The sidewalk campus of Wayne University, Detroit, is breeding an arithmetic project that may prove to be an extra right arm for the automotive industry. A "computation laboratory" is in the making.

• **Marriage Plans**—It is being patterned after Massachusetts Institute of Technology's center of analysis and Harvard's computation laboratory. But it doesn't follow the pattern very far. For Wayne's goal is a marriage of industry and education toward solving problems on the practical, applied level of everyday working.

Up to now, automatic computing has been mainly a military show. Of some 25 automatic-electronic-sequence controlled-card programmed calculators (International Business Machine's latest type) in existence today, the government has its hands on the bigger part. Private engineers want to change that. With research problems growing beyond the grasp of individual experimenters and consuming the time of whole batteries of engineers, they say they are desperately in need of calculators, too.

• **Practical View**—But they are less interested in last-word machines than in something that can help them now. That's where Wayne's program comes in. Arvid Jacobson, professor of mathematics, hopes eventually to pull Wayne up to the level of the eastern schools in excellence. But Wayne is strictly a latecomer in pioneering computing machinery. Its equipment is archaic. Two machines now reposing in its Science Hall were turned over to Wayne by M.I.T. late in 1949. As M.I.T. developed into more involved and speedier machinery, it had sentenced these computers to the role of dust collectors. Wayne was glad to grab them. It reasoned that even a slow computer right in Detroit was a lot more help than a rocketing one in Boston.

• **Auto Problems**—Automotive engineers say amen to that. If a computer takes an hour to solve a problem instead of half a second, they don't care. The important comparison is an hour vs. a month, or months.

There's a mountain of arithmetic involved in every step of auto research. Calculations for a single hypoid gear in a rear axle require the evaluation of about 670 items; roughly a third of these are trigonometric functions. The data run to six figures. A man working

at a desk calculator for six days can do the problem. Put in shape for computer solution, the problem could be worked out within an hour.

Examples of how computing could aid engineering and research are endless. Chrysler Corp., working with an IBM computer of fairly simple type, immensely sped research on the new "fire-power" engine, especially where it concerned the entirely new cam and cam-drive setup.

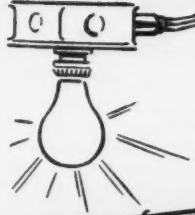
• **Gains for Industry**—The auto industry and other Detroit firms, such as Burroughs Adding Machine, Detroit Edison, etc., show every indication of going along with Jacobson's project. The Wayne laboratory will bring them computers close at hand for solving problems. And it will help to fill a serious gap: trained men to set up and operate computers within plants, mathematicians who understand industry needs.

The lack of skilled men in computing is natural; the field is relatively new. The first really effective "differential analyzer" was built in 1931 by Dr. Vannevar Bush at MIT; it's the same so-called DA that Wayne possesses today. Bush's DA is an "analogue" type—it works mechanically. Dozens of shafts and gear trains rotate to grind out problem answers. So many degrees of revolution of a shaft represent—are analogous to—a number of formula sign. Other analogue computers represent numbers by voltages, linear distances, intensity of light. The long-used slide rule is an example.

• **Tomorrow's Machines**—The engineering problem is essentially one of using little data and very involved formulas. This requires special types of calculators. Many of them are still to be built. Auto engineers know fairly well what they would like to have. They hope to be able to put this across to machine builders through Wayne's new cooperative program.

• **Business Gains**—In business accounting, what is now needed most in applying computing adds up to two primary requirements: (1) studies of administrative organization to find where and how computing could be applied for best results; and (2) men to install and operate the fantastically involved machinery.

Wayne University's computation laboratory will soon be helping to fill both needs. Industrial engineers will sit as advisers.



**PREPARE FOR TODAY'S DEMANDS
WITH THESE
G-E WIRING FACTS!**



**4. HOW CAN YOU PROTECT MACHINE
TOOL LEADS FROM VIBRATION?**

Rigid protection used for this purpose is often bulky and fails to provide the necessary "play." HOW DO YOU GET THE RIGHT PROTECTION?

**1. WHAT'S THE NEW WIRING SYSTEM THAT OFFERS
BRAND-NEW FLEXIBILITY OF LIGHT CONTROL?**

A new G-E system gives flexibility of light control, provides centralized, ON-OFF control of lighting for foremen, night watchmen, and administrative personnel—and, at the same time, makes possible individual control right at benches or desks. WHAT IS THIS NEW SYSTEM?

**2. HOW CAN YOU ADD EXTRA
POWER LOADS TO YOUR PRESENT
ELECTRICAL RACEWAYS?**

Your operations may be limited because of the type of cable now in service in your raceways. You may be able to use these same raceways and still provide for extra power. HOW?



**3. WHAT'S THE DISTRIBUTION SYSTEM
THAT LETS YOU PLACE MACHINE TOOLS
ANYWHERE ON THE FLOOR?** Changing production requirements demand electrical flexibility in floor layout. For electrical availability your plant needs the distribution system that puts power where you need it, when you need it. WHAT IS THIS SYSTEM?

**5. WHAT IS THE BEST WIRE TO USE
IN LOCATIONS EXPOSED TO GASOLINE?**

This condition formerly required the use of heavy, lead-sheathed cables. Today, a new General Electric lightweight, hydrocarbon-resistant wire helps you do the job efficiently and economically. WHAT SHOULD YOU SPECIFY?

Answers

1. It is General Electric's new, low-cost, multi-point remote-control wiring system. Use it for added flexibility of control.
2. By substituting General Electric's Deltabeston® type AVA cables for ordinary cables with 60C rating, you may be able to add as much as 64% more current to your existing raceways.
3. G-E Fiberduct raceways—non-corrosive, underfloor ducts—can be laid in your concrete floor in a grid pattern that will permit installation of machines anywhere along the ducts.
4. Use G-E flexible steel conduit for vibration-proof installations in close quarters.
5. General Electric Geotrol wire is the full name of this new gasoline-and-oil resistant wire. Listed by Underwriters' Laboratories, Inc.

*Registered trade mark of General Electric Company

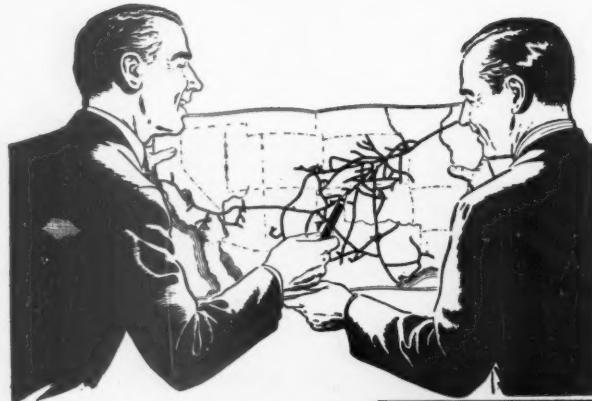
FOR FURTHER INFORMATION

on any General Electric wiring materials, see your local G-E Construction material distributor, or write Section K55-310, Construction Materials Department, General Electric Company, Bridgeport 2, Connecticut.

GENERAL ELECTRIC



Your answer man *with the Santa Fe*



*Where's my car? What
about special handling?
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Bring on your freight questions,
open up your freight problems.
Your Santa Fe freight representative
has the answers or knows
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He is either in your town or
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in your territory, plus the
"know how" of Santa Fe's entire
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specialists, is at your service, just
by a telephone call.

Let him tell you why and how
it pays to ship Santa Fe all the way!

F. H. Rockwell
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**it pays
to ship ↓**



all the way

Brine-Making Truck Comes to Your Plant

Texas Brine Corp. sells brine to a lot of industries in a lot of places. The salt water solution is used by the petroleum industry (for reworking oil wells), paper mills, makers of synthetic rubber and electrolytic chlorine, and water softening plants.

When the customers are too far from Houston, shipping is costly. So TBC engineers have designed a portable brine maker, which takes the salt right to the customer and makes the brine there.

A dissolving tank, brine filter chamber, and pumps and piping are all mounted on a tandem trailer. Each truck has a maximum capacity of 20 tons of salt. Here is how the machine is set up:

The customer's water line is tied in to the brine maker. Water comes into the dissolver under pressure and flows up through the salt particles. Valves equalize water flow for good distribution.

In 3½ hr., the machine produces 13,846 gal. of solution, which contain 18 tons of salt.



Air Photo—5,000 ft. Long

Air Force and Perkin-Elmer Corp. collaborated on the design of a panoramic aerial camera (background) that can take a continuous strip photo of the state of Pennsylvania on one roll of film in less than a day. Instead of a shutter, the camera has a rotating prism that hangs below the lens and scans in arcs up to 180 degrees. The film, 18 in. wide and from 200 ft. to 5,000 ft. long, is synchronized with the sweep of the prism to take a continuous picture of the terrain below.

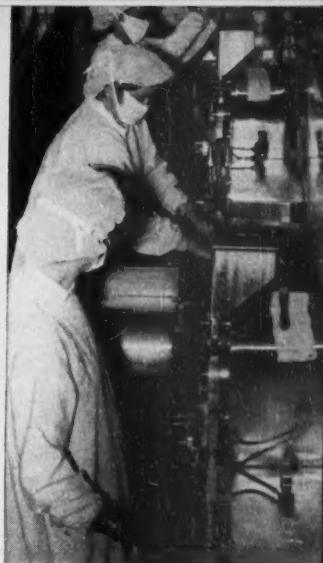
Chas. Pfizer & Co., Inc., is the discoverer and sole manufacturer of terramycin, the newest "wonder drug," which has proved effective in the treatment of *more than 50 acute infections*. Pfizer is the world's largest producer of antibiotics and a leading producer of synthetic Vitamin A.

Power—lots of it and never failing—is needed by Pfizer's modern plant at Groton, Conn., to safeguard round-the-clock production. The plant relies entirely upon its two steam turbines for power, light, and refrigeration. For the utmost protection, "Job Proved" Sunvis

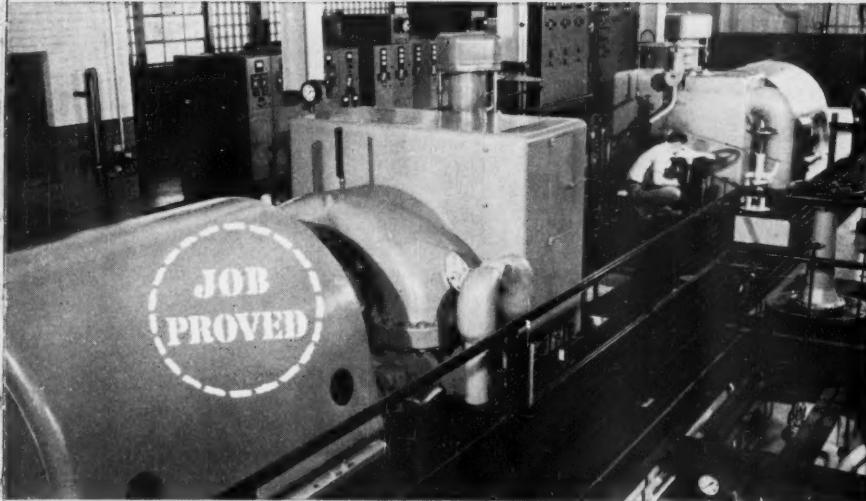
916 Oil was chosen as the lubricant for these turbines when installed—two years ago. This Sunvis 916 has been in continuous service ever since. As expected, inspections show the turbines free from rust, sludge, and corrosion; and laboratory tests show the oil ready for thousands of hours of continued service.

Sunvis 900 Series Oils are unsurpassed as turbine lubricants. Under normal operating conditions they will be *good for the life of your turbines*. For complete information, telephone the Sun Office nearest you or write Department BW-3.

TERRAMYCIN being processed as an elixir, a new dosage form in which this "wonder drug" is more easily taken by infants and old people. The work is carried on in a sterile air-conditioned room.



POWER FOR "WONDER DRUG" PRODUCTION PROTECTED BY SUNVIS TURBINE OIL



TWO 2,500 KW TURBINES, each charged with 300 gallons of Sunvis 916 Oil, generate all of the plant's power. The condensing-extraction unit has been running over 15,000 hours, the back-pressure unit over 7,000 hours.



THE LUBRICATING OIL flows continuously through a layer of wool, then a tank of water, and finally a triple bag filter. Recent tests at Sun's laboratories show that the oil is in excellent condition, and good for thousands of hours more.

SUN INDUSTRIAL PRODUCTS

SUN OIL COMPANY, PHILADELPHIA 3, PA. • SUN OIL COMPANY, LTD., TORONTO AND MONTREAL



fast pick-up!

ANOTHER EXAMPLE OF A

Better Way

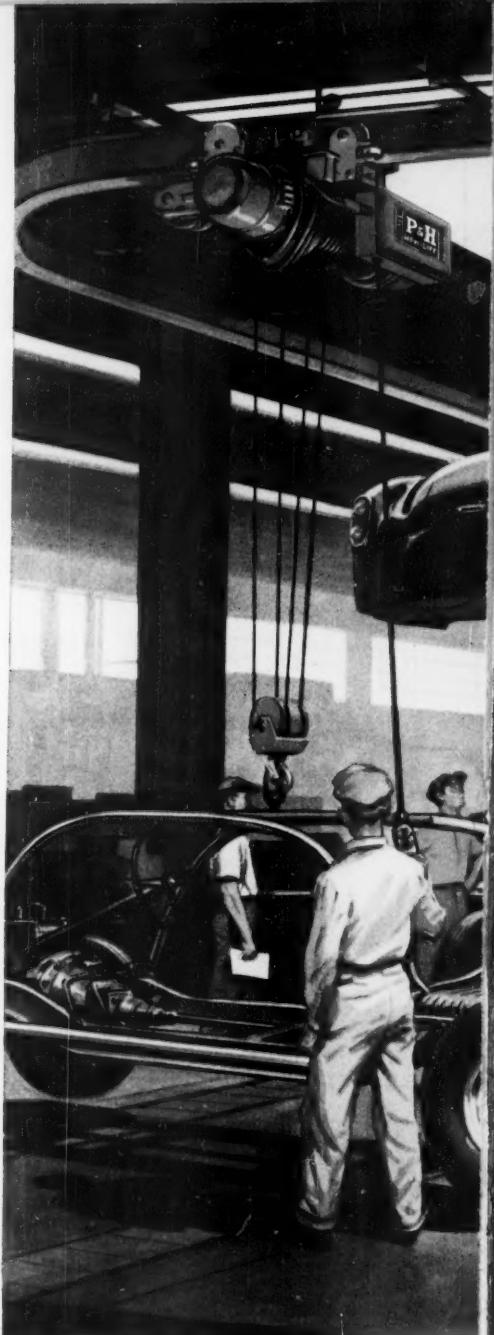
DESIGNED BY **P&H**

You watch as they whisk a chassis from one assembly line to another. You watch as the body comes to join it, lowered swiftly from above. And suddenly you know the secret of America's 15-car-a-minute pace: *fast handling*.

Here, for instance, one man does the job — better, one man's thumb — on a push-button electric hoist.

This is *thru-the-air* handling, as developed by P&H, world's largest builder of overhead handling equipment. Its purpose: to cut costs. On the average, *handling* accounts for 20 percent of all the manufacturing costs, so you know what savings can be made. And why so many plants move so many things *thru-the-air*, from raw materials to finished product, with P&H Electric Hoists.

As always, the customer shares in the savings. More people get more things, at lower cost — because P&H designed a *better way*.



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TRUCK CRANES



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POWER SHOVELS



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OVERHEAD CRANES



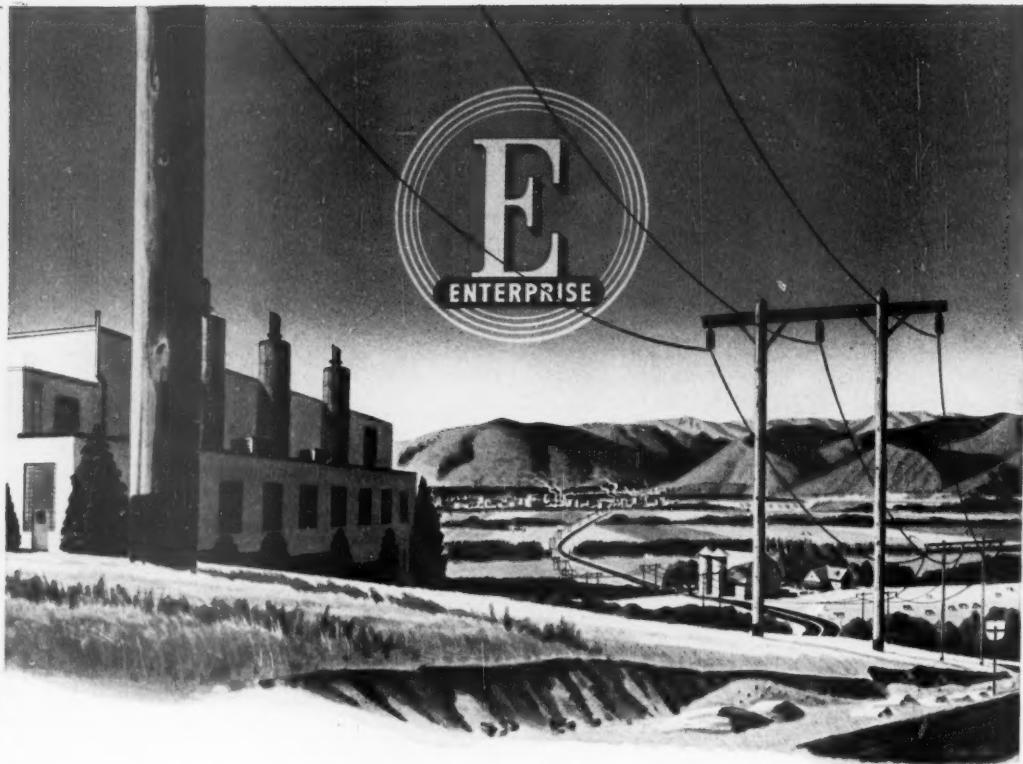
ELECTRIC HOISTS



WELDING EQUIPMENT

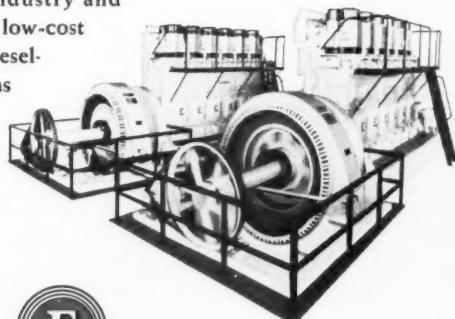


SOIL STABILIZERS



Pacers of Progress *...in diesel light and power*

Of increasing importance to communities, industry and agriculture today, is the need for a dependable, low-cost source of electric power. That's why modern Diesel-electric plants are being operated in so many areas throughout the world. From a quarter century of development and engineering, Enterprise Diesels are contributing to this progress and growth. We will be glad to assist you with your specific power requirements.



ENTERPRISE Diesels



A DIVISION OF GENERAL METALS CORPORATION
San Francisco 10, California

Enterprise diesels and generator sets are available in stationary, portable and marine models, from 68 to 1755 B.H.P.

STATIONARY AND MARINE DIESELS • OIL BURNERS • PROCESS MACHINERY

NEW PRODUCTS



Machine Sets Saw Teeth

Smooth, accurate sawing depends as much upon the set—or angle—of the teeth as upon their sharpness. Consecutive saw teeth are set at opposite angles, so alternating teeth are alike. Setting the two rows of teeth generally requires two separate operations, but Foley Mfg. Co. has a machine that does both rows uniformly in a single run.

Foley's automatic setter has a twin-hammer action. Powered by a single spring, two hammers strike simultaneously in opposite directions. First you adjust for size of teeth, depth of set, and saw thickness. Then turn on the motor, hold the saw lightly as it feeds through the machine from right to left. It takes about 30 sec. to set a standard 26-in. saw.

Foley says you can use the setter before or after filing without dulling or breaking teeth. And you don't have to remove the saw handle. The setter handles hand saws that have 5 to 16 points per in., band saws with 3 to 8 points.

• Source: Foley Mfg. Co., Minneapolis 18, Minn.

• Price: \$139.50.

For Water Without Bugs

In industrial processing, power systems, and air-conditioning installations—wherever large amounts of cooling water are used—you always have a problem of slime formation and microbial life. Monsanto Chemical Co. says it has an effective and economical agent for combatting bacterial and algal growth. It's available in experimental quantities.

The compound, called Santophen 45,

comes in the form of small, brown flakes. It's readily soluble in water, performs particularly well in acid waters. You introduce it into the system at any convenient point, can use it alone or with chlorine and other chemical agents. The exact dose depends on conditions in a particular water system. Warning: Santophen 45 is not recommended where odor is a consideration.

- Source: Monsanto Chemical Co., St. Louis 4, Mo.
- Price: 39¢/lb. for lots of less than 1 ton; 34¢/lb. for lots of 1 ton or more.

Hot Wax Stays Hard

Wax doesn't have to melt when it's heated, says Flexrock Co. The company has developed a series of waxes that reportedly fail to melt even at the point of combustion.

Flexrock specially processes such waxes as paraffin, petrodatum, beef tallow, and beeswax, recommends its products for use at high temperatures. The nonmelting waxes are slightly harder than unprocessed wax and have a higher softening point. But wax solubility isn't affected. Price of the Flexrock wax is slightly above that of the corresponding untreated wax.

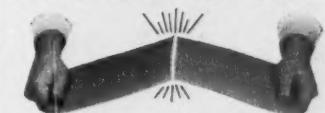
• Source: Flexrock Co., Filbert and Cuthbert, W. of 36th St., Philadelphia 4.

NOW IT'S FLEXIBLE!



BEFORE CURING, DUROID 600
is flexible but not dimensionally stable.

NOW IT'S BRITTLE!



AFTER CURING, DUROID 600
is snap-finger brittle but, immersed in hot or cold water, it has better dimensional stability than laminated phenolic.

This Fiberloy was created to meet the need for a material with controlled dimensional stability, for spacers in a unique oil filter. Scrap reclamation permitted low-cost fabrication. It shows, again, that Rogers can do unusual things with materials to make engineering dreams come true.



Automatic Pipe Fitter

Cleveland Tapping Machine Co., a subsidiary of Automatic Steel Products, Inc., has a unit, called Model F, that

THE DURODS are special formulations developed to provide specific mechanical and chemical characteristics. They blanket the range of materials properties from laminated phenolic, down through the vulcanized fibres, to paperboards.

OTHER FIBERLOYS by Rogers include special purpose impact phenolics, in bulk or sheet form for molding, and special purpose laminates.



"Here's Rogers and Its Fiberloys" is an entertaining booklet that will help you decide if the FIBERLOYS have a place in your products. Please write for it to Dept. B, Rogers Corporation, Manchester, Connecticut.

ROGERS CORPORATION

Established in 1832



What deburrs clutch discs three times as fast?

...a brush!

To make tractor clutches operate smoothly, all burrs and sharp corners had to be removed by hand-filing and brushing the clutch disc teeth. Now, a five-station rotary automatic machine equipped with Osborn power brushes gets these results:

Triples output. Releases skilled personnel for other defense work. Assures uniform finishing of every disc for dependable clutch performance.

An Osborn Brushing Analyst will gladly study your product-finishing and cleaning operations to suggest ways to speed production and cut costs. Call or write *The Osborn Manufacturing Company, Dept. 455, 5401 Hamilton Avenue, Cleveland 14, Ohio.*



LOOK FOR THE NAME OSBORN . . . RECOGNIZED EVERYWHERE FOR
QUALITY WORKMANSHIP AND MATERIALS

does a fast job on pipe fittings. It taps threads and bevels—two elbow or T-fittings simultaneously at a rate of at least 1,500 an hour.

Model F is fed from a magazine-type hopper; its operations are completely automatic. The holding jaws are adjustable and are quickly changed for various size fittings. Working with malleable steel, the unit can make 1,500 finished fittings an hour. If the fittings are brass, it can produce up to 1,800.

Cleveland builds two Model F machines: Model FT-1 handles fittings with an inside diameter of $\frac{1}{2}$ in., $\frac{3}{4}$ in., or 1 in.; Model FT-2 takes 1 $\frac{1}{2}$ -in., 1 $\frac{1}{4}$ -in., and 2-in. fittings. Driving power for FT-1 consists of two 5-hp. motors for the horizontal spindles, one $\frac{7}{8}$ -hp. motor for the vertical spindles, while FT-2 uses four 5-hp. motors.

- Source: Cleveland Tapping Machine Co., Canton, Ohio.
- Price: \$12,400 to \$14,650.

NEW PRODUCTS BRIEFS

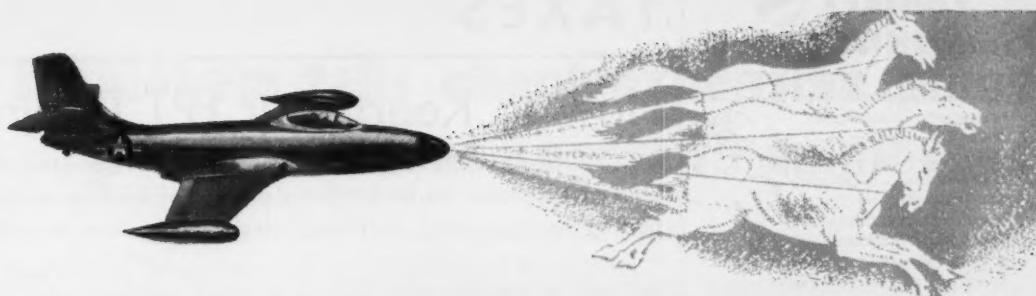
A masking compound for welding protects adjoining metal surfaces from alloy spatter or gas flame. Called Eutect-Mask, it is canned in thin paste form, is easy to remove after the welding operation is over. The manufacturer is Eutectic Welding Alloys Corp., 40 Worth St., New York City.

A metal-stripping process used by Stratford Co., 207 Bay St., Bridgeport, Conn., removes coatings from items you send in. The process reportedly strips chromium, nickel, or copper coats—without pitting the base metal.

Du Pont's Neoprene can now be used as an air-dry protective coating for steel, concrete, and wood. Applied with a brush or spray gun, it withstands exposure to oil, grease, and chemicals better than oil-base paints, according to du Pont. Gates Engineering Co., Wilmington, Del., produces it under the name of Gaco Neoprene Maintenance Coating.

A boiler conditioner made by Agava Products, Inc., 34 Exchange Place, Jersey City, N. J., is easy to use: You just add half a can to the boiler water. Made from extract of the tropical agave plant, the conditioner prevents impurities from adhering to metals.

A desk-top copymaker of Polaroid Corp., Cambridge 39, Mass., designed for use with the Polaroid Land Camera, turns out finished copies of documents, letters, drawings, and photographs in 60 sec. The unit plugs into any a.c. outlet, makes 3 $\frac{1}{4}$ -in. x 4 $\frac{1}{4}$ -in. pictures.



TAKING MORE WEIGHT OFF THE "HORSES"

through

MAGNESIUM

LIGHTENS THE LOADS OF AMERICA

How high, how fast and how far today's airplane flies depends on its "horses"—and its weight! Just increasing horsepower isn't enough . . . lowering the weight-to-horsepower ratio by decreasing the weight of the engine is just as important. The power plant of the modern aircraft contains less weight per horsepower than ever before. Weight has been taken off "horses" with magnesium, the world's lightest structural metal.

One type of turbo jet uses over 40 different magnesium castings, weighing from $\frac{1}{4}$ pound to over 100 pounds. It was only through the utilization of magnesium that the desired objective of minimum weight structure could be obtained.

Light weight is of equal importance in small engine castings as in large jet engines. For instance, a power chain saw

manufacturer obtained substantial weight reductions through the use of magnesium over previously used metals. This resulted in less vibration and a marked reduction in worker fatigue . . . a better product through the use of magnesium.

In addition to lightness, magnesium is easily fabricated into all common forms . . . castings, forgings, extrusions, sheet and plate. These forms are readily machined, formed or otherwise worked by known methods.

Wherever a product is made to be moved or lifted, magnesium should be investigated. A vital metal in our aircraft today, it offers you tremendous opportunities in improving your product tomorrow. Keep your eye on magnesium if light weight is your aim.

Wherever lightness is important, consider

MAGNESIUM first!



Power tool manufacturers find that the use of magnesium permits better design for compactness and provides needed strength, shock resistance, and rigidity.

Magnesium Division, Dept. MG-13A

**THE DOW CHEMICAL COMPANY
MIDLAND, MICHIGAN**

New York • Boston • Philadelphia • Washington • Atlanta • Cleveland • Detroit
Chicago • St. Louis • Houston • San Francisco • Los Angeles • Seattle
Dow Chemical of Canada, Limited, Toronto, Canada



VARIETY with UNIFORMITY

Here's an important thing to remember about Fuller Adhesives: you have an almost unlimited VARIETY to choose from . . . yet every time you order, you can count on UNIFORM QUALITY. Every Fuller Adhesive is produced according to exact specifications. Ask your Fuller man to help you select the adhesives that will fit your requirements EXACTLY.



Fuller

ADHESIVES FOR INDUSTRY

H. B. Fuller Co. St. Paul 2, Minn.
Kansas City 6
Cincinnati 2
Atlanta
Chicago 47
San Francisco 3
Buffalo 7



"No Winding Burnouts with Klixon Protectors," Cheers Up-To-Date Electric Repairman

ALBANY, N. Y.: Carmon Slingerland, Casey's Electrical Repair Shop, gives the kind of advice . . . and the kind of service . . . that's bound to keep him and his company well abreast of today's competition.

"In our experience," states Mr. Slingerland, "there is no question but what Klixon Protectors prevent winding burnouts. This is especially important in appliance motors where Klixon Protectors mean greater customer satisfaction and fewer service calls."

The Klixon Protector illustrated is built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like increased customer satisfaction, reduced service calls and minimized repairs and replacement, it will pay you well to ask for equipment with Klixon Protectors.



KLIXON

SPENCER THERMOSTAT
Div. of Metals & Controls Corp.
2002 FOREST STREET
ATTLEBORO, MASS.

TAXES

How to Keep Your EPT Down

Analysis of BIR regulations shows how smart operating can pare excess profits tax. Undistributed profits may raise tax exemption. So may borrowing, or issuing notes when you buy on credit.

The Bureau of Internal Revenue has just issued its regulations telling business what to do about the excess profits tax. And it's one of the most complex tax mechanisms that business executives have ever struggled with.

One thing is clear, however: Whether your company is large or small, the way you handle many ordinary, day-to-day transactions may make a big difference in the excess profits tax you have to pay.

• **Tax Rates**—Excess profits taxes are levied on all income above and beyond an exemption, or credit. You have a choice as to how you compute that credit, and you're allowed to pick the credit that gives you the lowest tax.

All companies get an automatic \$25,000 minimum credit. On the first \$25,000 of your income, you pay only the 25% normal corporate income tax.

On income over \$25,000 but within your EPT credit, you pay the combined normal tax and surtax, a total of 47%.

On income above your credit, you pay that 47% plus the 30% excess profits tax—a total of 77%.

But there's an overall ceiling: You never have to pay more than 62% of your income in taxes. That means there's a point at which you stop paying the 77% rate and start paying only 62% on the rest. That point works out at twice the amount of your credit plus \$18,333.

I. Credit Is the Key

It's obvious that the key factor is the size of your credit. And there are many things you can do to boost the size of that credit, and thus to cut your tax bill.

• **Two Methods**—Basically, there are two methods of figuring your EPT credit: It's either (1) 85% of your average earnings in the best three out of the four years, 1946-49; or (2) it's a fixed percentage return on your investment. But there are an awful lot of variations within each basic method.

• If you choose the average-earnings base, you may be able to rearrange the figures for the base years, or even to include 1950. To qualify for this special treatment, you have to show some abnormal circumstance—growth

in or just after 1946-49, a new product, or an industry depression—in the 1946-49 period.

• The investment credit may be based on paid-in capital plus accumulated earnings at the start of the tax year. Or it may be based on net assets. Once you have determined your "capital" or "assets," you get a credit of 12% of the first \$5-million, 10% of the next \$5-million, and 8% of anything over that.

• **Capital Changes**—No matter what method you use—even if you use the average-earnings base—you must adjust your credit each year for any change in your capital. The credit is boosted by 12% of the added capital or cut by 12% of any capital reduction.

That's logical, if you stop to think about it. If your capital today is twice what it was in the base period, you're entitled to twice as much income before you're subject to excess profits tax.

So the various day-to-day business transactions that can, in the Internal Revenue Bureau's eyes, change your capital are what you want to watch.

II. Ways to Control Credit

• Some types of payouts to stockholders will reduce your capital; so will nonbusiness investments.

• New equity capital and retained earnings are considered 100% as increases in capital; new borrowed capital comes in at 75%.

• **Cash Dividends**—Take dividends, for instance. Profits not distributed to stockholders can cut your tax because they increase your capital. The key date is the last day of the year. Accumulated earnings on that date hike the credit that you use to compute your EPT for the following year.

There's one catch: Dividends paid in the first 60 days of a year reduce the credit for that year. In other words, they're applied retroactively to the credit computed as of the first of the year; it's just the same as if you had paid them before the end of the preceding year.

Example: ABC Corp. retains \$50,000 of earnings in 1951 after paying all dividends. If it has that \$50,000 in its possession on Dec. 31, 1951, its EPT credit for 1952

Bethlehem tells about expansion plans in Annual Report to Employees



Annual Steel Capacity to Reach 17,600,000 Tons by End of '52

The current expansion program will bring Bethlehem's steel capacity to 17,600,000 net tons annually by the end of 1952. This is an increase of 2,600,000 tons over the 1950 capacity.

In a message to employees, E. G. Grace, Chairman, said: "Along with this growth there has been continuing emphasis on human values. Good

housekeeping and good working conditions in our plants are of major importance. Our social insurance and pension provisions have been improved. Our safety record has been the best in history, with in-plant accidents far lower than those on the highway or in the homes. We have made notable progress in industrial medicine."

pensions, social insurance, and safety, the main feature is a detailed description of Bethlehem's current program of expansion.

Although it is intended for employees there are many outside the company who find much of interest in the report. If you would like to see it, write for a copy to the Publications Department, Room 1043, Bethlehem Steel Company, Bethlehem, Pa.

31 Safety Awards to Company in 1950



During the 1949-1950 competition sponsored by the National Safety Council, sixteen Bethlehem operations won recognition for outstanding achievement in the promotion of safety. In addition, awards for accomplishments in safety were received by other Bethlehem operations from the Steel Founders' Society, the U. S. Bureau of Mines, and the Joseph A. Holmes Safety Association, making a total of 31 awards in all.



Mill Speed Doubled

Chief aim of the expansion program is more steel. But in addition new finishing facilities are being added, and existing ones improved. For example, the speed of the cold-reducing mill shown above has been doubled, with a corresponding increase in output.

Highlights	
IN BETHLEHEM'S OPERATIONS FOR 1950	
Plant capacity	1950 1949
Net tons	15,000,000 12,600,000
Metals reduction rate	8,120,000 6,200,000
Electric power	1,000,000 800,000
Water usage	2,200,000 1,800,000
Steam produced	1,000,000 800,000
Heat energy consumed	1,000,000 800,000
Total payroll	\$24,000,000 \$18,000,000
Number of employees	11,900 10,000
Average weekly earnings	\$2,000 \$1,800
Total production volume	12,600,000 10,000,000

Highlights of 1950 Operations

The Annual Report to Employees contains a brief summary of the year's operations, including total revenues, total payroll, steel production, number of employees and their average earnings, taxes paid, and other data.

Steel Capacity Grows Faster Than Population



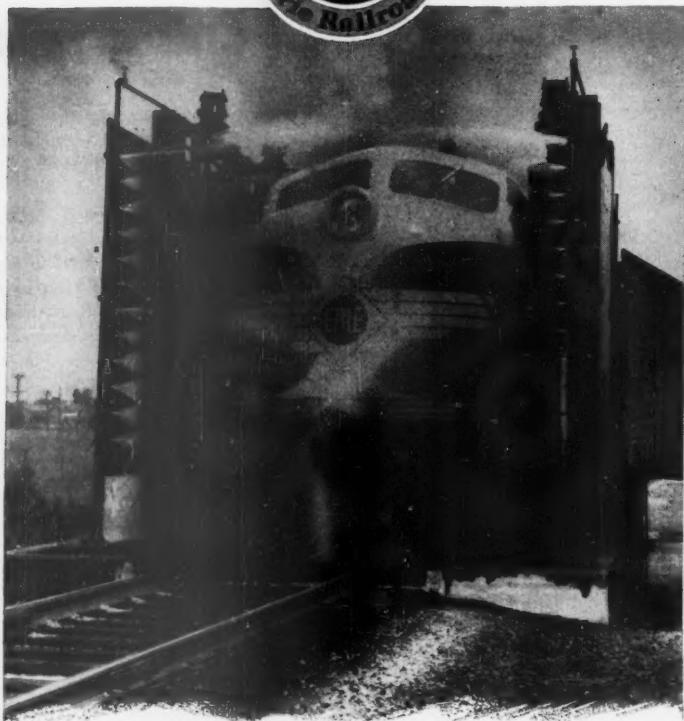
BETHLEHEM STEEL



A MILESTONE IN



AMERICAN HISTORY



Bath for a Big Baby

"Housekeeping" on a railroad, keeping cars and locomotives clean, has developed ingenious machines like the one you see here to do the job better and faster.

Here is one of Erie's big diesels getting its regular bath. Chemically-treated water sprays out of dozens of jets under high pressure. Huge circular brushes whirling at high speed remove the grime that accumulates so fast on a busy railroad. Out moves the diesel—all 200 feet of it—spick and span in gleaming black and yellow in less than three minutes, ready for its next run!

You may not think cleaning a diesel important, but it is typical of how Erie attacks every problem in its constant search of finding ways to run a better railroad.

It all adds up to progressive railroading—the continuous effort to improve the

safe, dependable transportation of passengers and freight. It is this spirit which has earned the Erie the reputation as a leader among railroads—ready to serve our country well, in peacetime or in war!

Erie Railroad



...Mark of PROGRESS
in Railroading

is boosted by 12% of \$50,000, or \$6,000. But if it pays, say, \$25,000 in dividends any time during the first 60 days of 1952, that cuts the credit back again by 12% of \$25,000, or \$3,000.

Aside from that first-60-days provision, cash dividends don't affect your credit—unless you pay out more than you earn. If you do that, you're reducing your accumulated earnings, so your credit for the current year is cut by 12% of the amount by which dividends exceed income.

• **Stock Dividends**—But stock dividends are a special case. The key question is whether the stock dividend is taxable as income to the recipient. Basically, a stock dividend is taxable to the recipient only if it increases his proportionate interest in the income and liquidating value of the company. If the stock dividend is not taxable, it does not affect your EPT credit.

But stock dividends that are taxable affect your credit in two opposite ways: (1) They reduce the accumulated-earnings part of your capital structure as of the end of the year in which they're paid; and (2) they increase your capital immediately.

At the end of the year—the date on which your next year's EPT credit is figured—the two balance out exactly; it's just as if you had declared a cash dividend and then the stockholders had all reinvested in new stock. But you gain on the current year, because the hike in capital becomes effective on the date the stock dividend is paid.

Example: If you pay a taxable \$100,000 stock dividend on July 1, 1951, your 1951 credit is boosted by 12% of \$50,000 (the \$100,000 is averaged over the year). For your 1952 credit, the \$100,000 increase in stock outstanding is balanced exactly by a \$100,000 cut in accumulated earnings.

III. Borrow to Save

If your income is subject to excess profits tax, you can actually make money by borrowing money. You save more in taxes than you pay out in interest on the loan (as long as the interest rate is below 6%). The reason is that the interest is fully deductible in figuring your 47% normal tax and 25% deductible in figuring your 30% excess profits tax. At the same time, 75% of the loan is considered an addition to capital, so your EPT credit is boosted by 12% of 75% of the loan (BW-Mar. 3'51, p114).

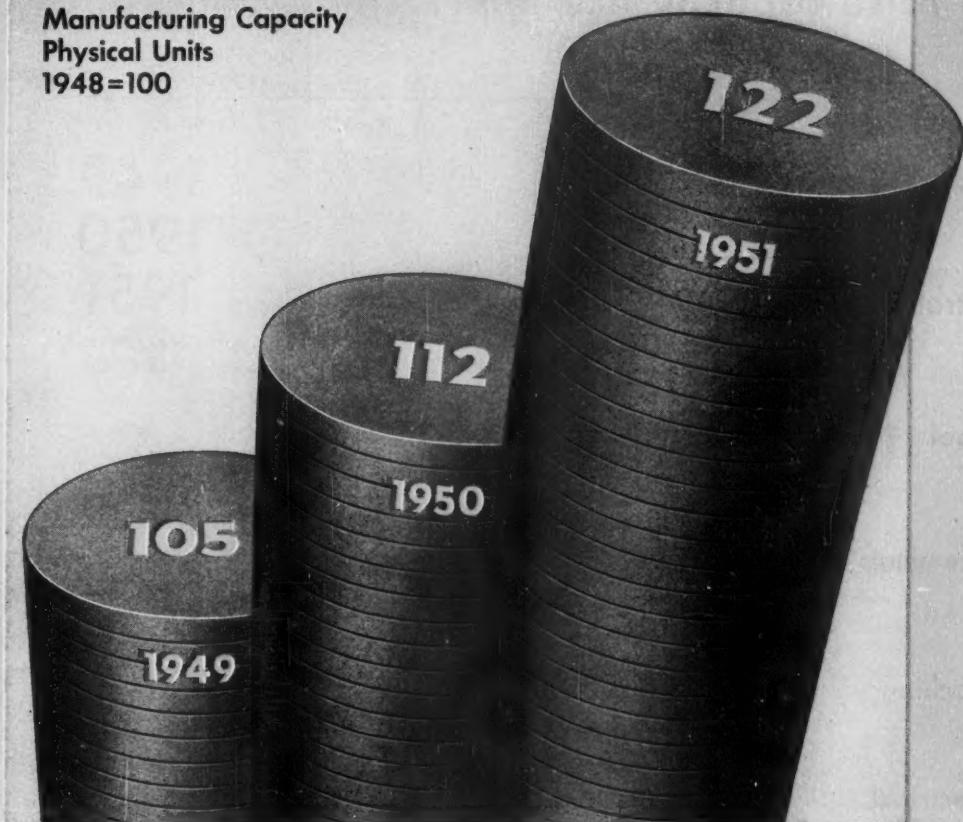
• **Notes Help**—Open-account credit doesn't count; this only works when there are notes outstanding. So if you've been buying goods on open account, you had better look again. You'll make money if you issue notes in the future for goods you buy or credit—or even for existing accounts.

More Production

Manufacturing Capacity

Physical Units

1948=100



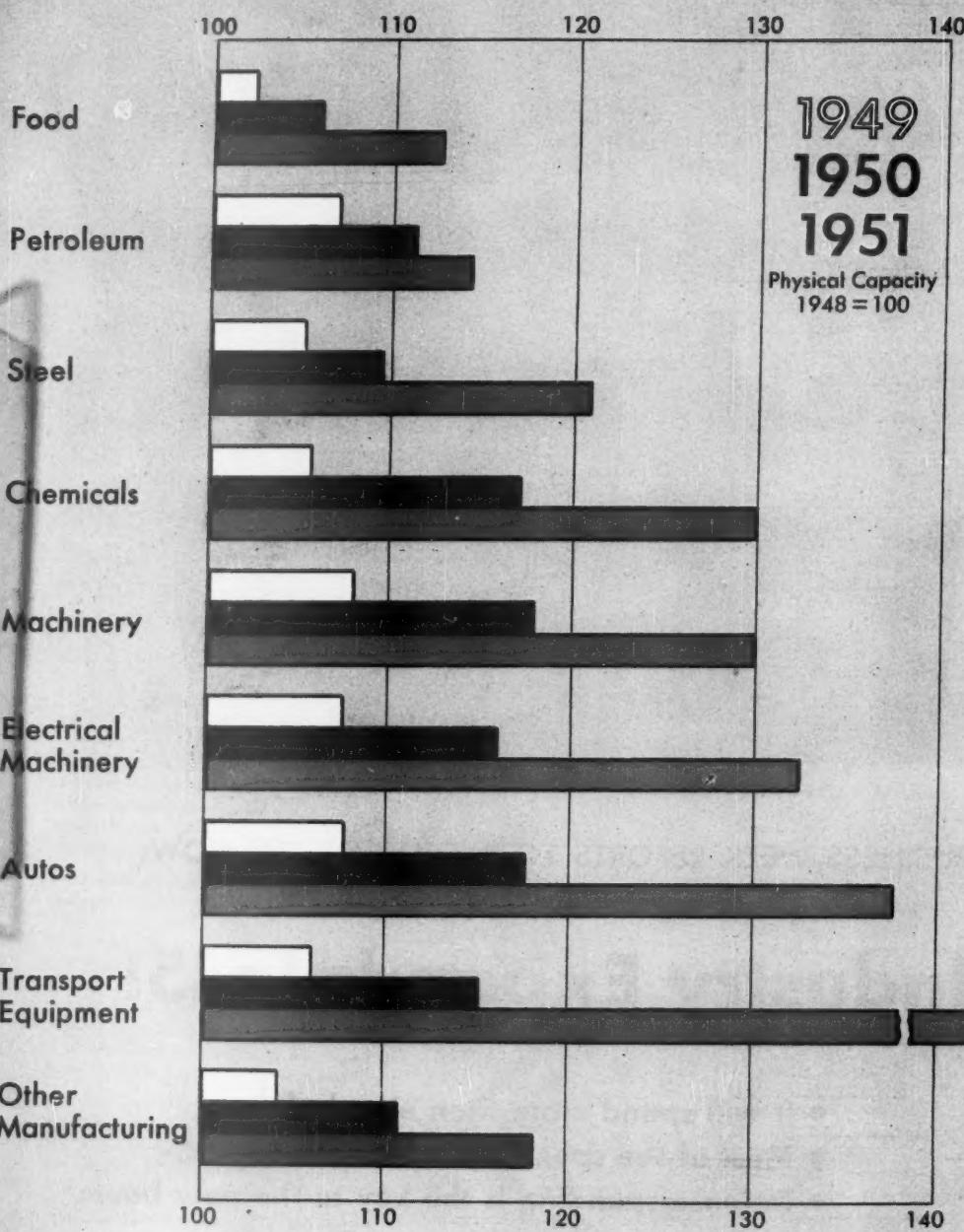
BUSINESS WEEK REPORTS TO EXECUTIVES ON HOW:

Industry Expands In '51

- It will spend more than ever before
- Most of the spending is for new capacity
- Defense spending is the key to the new boom

U.S. Industry Is Getting

To raise capacity like this...



Bigger and Bigger

...industry is spending this much

Capital Spending (millions of dollars)

	1949	1950	1951	% Change 1950-51
Food	\$600	\$705	\$945	+34%
Petroleum	700	700	995	+42
Steel	520	575	1,345	+134
Chemicals	1,100	1,350	2,140	+59
Machinery	530	635	940	+48
Electrical Machinery.....	200	180	315	+74
Autos	420	875	1,330	+52
Transport Equipment	145	130	490	+277
Textiles	410	465	680	+46
Other Manufacturing.....	2,575	2,450	4,165	+70
All Manufacturing	7,200	8,065	13,350	+66
Railroads	1,310	1,175	1,705	+45
Electric and Gas Utilities.....	3,160	3,200	3,490	+9
Other Transportation and Communications	1,880	1,700	1,900	+12
Mining	750	700	1,100	+57
ALL INDUSTRY	14,300	14,840	21,544	+45

Data: McGraw-Hill Survey.

© BUSINESS WEEK

INDUSTRIAL EXPANSION this year is going to be terrific. It couldn't be otherwise with a husky mobilization program hitched in double harness with a fast-moving civilian economy. To get more guns and more butter at the same time, you've got to raise the productive capacity of both sides of industry.

That's exactly what U.S. industrial managers plan to do this year. Their present capital spending plans dwarf anything that has ever gone before. When the postwar investment boom reached its highest point in 1948, everyone conceded it was the biggest yet. But it wasn't even close to what's in the works now.

• **Trend Reversed**—It's the culmination of a trend that began after the inventory recession of 1949 (BW-Jan. 21'50, p73). In that year expenditures for new plant and equipment slid off

around 12% from the year before.

And, at the beginning of 1950, the outlook still wasn't bright enough to encourage elaborate expansion programs. For one thing, unemployment was at its highest point since the beginning of World War II. Besides, the ambitious capital programs that most companies had mapped out for postwar were largely completed. So business began to pull in its horns. It expected a drop in consumer demand. Plans for 1950 called for a further drop of 14% in new installations.

But demand didn't drop. Paradoxically, it began to pick up. And with the increase in production, plans were revised upwards.

Then came Korea. That's when industry really started rolling.

• **Still More**—A BUSINESS WEEK survey taken in October (BW-Nov. 11'50, p19) showed plainly that capital spend-

ing had begun to perk up. Industry reported that spending in 1950 would come out about even with the year before. Actually, spending picked up so rapidly by yearend that it topped 1949 by 12%. Even then plans for 1951 indicated that expansion of manufacturing plants would beat 1950 by 20%, even top record-breaking 1948.

Since last fall, industry has had time to dream up more plans. It has been figuring how many new plants could be or should be added to produce enough for a large military program and still have enough to keep consumer goods flowing at the high postwar rate. Just how phenomenal a pace has been set is evident from the latest survey on industry's capital spending intentions made by the McGraw-Hill Dept. of Economics. Here are the facts revealed by the survey:

• Plans for industrial expansion of

A Closer Look:

Here's a sampling
of individual
trade plans

Percent Change in Capital Spending 1950-1951	
Agricultural machinery	+35%
Baking	+32
Building materials	+52
Canning	+53
Cement	+46
Confectionery	-25
Construction & mining machinery	+66
Engines & turbines	+77
General Industrial machinery	+48
Glass	+67
Metal containers	-6
Metalworking machinery	+96
Nonferrous metals	+175
Paper	+106
Rubber	+61
Service industry equipment	+15
Special industry equipment	+23

Data: McGraw-Hill Survey.

all industry call for a jump in dollar outlays of 45% over last year.

• In manufacturing industries the rise is even more overwhelming. Ex-

penditures in 1950 were \$8-billion. But in 1951 manufacturers want to shell out over \$13-billion to replace old equipment and build new factories.

Everybody Wants Everything

Will those goals be reached? And if not, why not?

In normal times, of course, a decision to invest is readily translated into new equipment. You just go out and buy what you want. But these are not normal times. Rearmament started from practically full employment and production. There was hardly any slack to take up. That means that consumers, government, and industry are all chasing after only a slightly larger amount of goods. And they all want more now than they had before.

The first claim on everything—men, money, materials, machines—goes to the military. The armed forces' grab, comparatively small so far, is scheduled to double by yearend. Contracts are going out at the rate of \$60-billion annually. That will soon put real pressure on available supplies.

• **Argument**—It then becomes a question of how much the consumer gets out of what is left, and how much is channeled into increasing capacity.

That's where the argument starts.

There are the let's-do-it-now brand of expansionists who support all-out expansion of facilities. They say, "Let the consumer take it on the chin for a while. Once the plant is in, there'll be more of everything for everybody."

Then there is the go-easy way of looking at new capacity. The thought here is that trying to do too much at once will mean less for all. Those in this camp say, "If you try to expand too rapidly, material and manpower shortages become even more critical, and bottlenecks will keep everything up in the air. It would be like three people trying to get through a revolving door at the same time. Nobody would get through."

• **Uninhibited**—But central direction of materials is not yet the determining factor. And until a full-fledged Controlled Materials Plan and a genuine priority system for expansion go into effect, industry is still on its own. If you have the money and can get the

materials, you can expand all you want. And so far this year, industry is keeping up with its ambitious plans.

For the beginning of 1951, industrial construction, private and public combined, is running 118% ahead of last year. And the military program, slow as usual to get under way, won't be making too much of a drain on supplies until the third quarter of the year. After that it will get really tough.

By midyear, industry will already have a good part of the expansion program under its belt. But the factory buildings started in the last half of 1950 and the beginning of this year will still have to be equipped.

Survey Highlights

Any way you look at it, expansion is going to be tremendous.

Investment—Industry wants to spend \$21.5-billion on new plant and equipment this year. That would boost spending +5% over last year's expenditures of \$14.8-billion. There are sweeping differences between industries—ranging from a relatively modest increase of 9% by the electric and gas utilities to a giant surge by the aircraft and other transport equipment makers that would boost spending by 277% over last year.

Capacity—Translate manufacturing industry's goal from dollars to physical production, and you see it will further enlarge capacity by 9%. That will put the output potential some 22% over the end of 1948. Remember that since 1939 manufacturing capacity has already increased 75%. So plans for 1951, if realized, will lift capacity 91% over 1939.

As you would expect, the greatest increases are in the industries that have to carry the bulk of the arms program. The aircraft industry is a natural. It's chiefly responsible for skyrocketing the transportation equipment field.

Chemicals, autos, and electrical machinery are also ticketed for sharp rises because all are heavy contributors to defense production.

Way on the low side is the planned boost in petroleum refining capacity. It will be raised only slightly as a result of this year's expansion effort. But that doesn't mean that the oil industry is dragging its feet. Petroleum is a highly capitalized industry. Just to get the 3% capacity increase expected, capital expenditures have to be boosted 42% over last year.

Expansion—The accent definitely is on adding to plant. Last year most of the money invested went into modernization and replacement of obsolete equipment. In 1950 only 43% of all funds going into capital goods went for expansion, whereas 57% went into replacement. This year there's a com-

plete switcheroo. Manufacturing firms want to put 58% of the investment dollar into enlarging facilities.

But even so, industry is going to come out ahead in streamlining existing plant. Dollarwise, replacement of old plant will jump about 22% over last year. But expansion spending for this year is figured for nearly 2½ times last year.

Construction—The shift from replacement to expansion shows up in new construction. For all manufacturing, new building is docketed to rise 79%. To get the 9% jump in manufacturing capacity, a lot more equipment is needed, too. But the first thing that has to be set up is a building to hold the machinery. So far this year, industrial construction is running way ahead of even the high-flying plans of industry for the rest of the year.

Financing—Most firms will not have much trouble in getting money for the larger programs. As in the past, financing will come mostly from internal funds. Companies have the dough and they'll spend it. So depreciation and retained profits will account for about 86% of all the funds needed.

Industry by Industry

Policy in Washington is to put the main weight of expansion on the basic industries. Down at the raw material and primary industry supplies level, every effort is made to encourage expansion because, if you have to switch over to a full war program before the goal is reached, it will be easier if there is an abundance of industrial raw materials flowing into the pipelines.

No matter how much cutting-up plant you have, it cannot turn out more than the sum total of its supplies. So insofar as government encouragement or restrictions have anything to do with it, finishing capacity will play a secondary role in the first stages of the post-Korea expansion program.

• **In Front**—In dollar-value increase over 1950, the fast-growing chemical industry is out in front. The chemical business has been one of the mainstays of the current investment boom since the end of World War II. Last year chemicals ran second in dollar outlay, with an expenditure of \$1.4-billion. This year it hopes to do \$790-million more than it did then—and the chances look good.

Steel and machinery are other industries that will probably fulfill their expansion expectations. Steel is programmed to spend 2½ times as much for expansion as it did in 1950; and machinery half as much again.

Steel is the one big stumbling block in the path of nearly every industry's plans for expanding capacity.

Expansion in the machinery field

The present program, by its very size, does require some reaching out for money from sources that weren't tapped last year. For instance, government-guaranteed loans. However, they will make up only 2% of the total that will have to be spent (practically all of it goes to the aircraft industry).

The biggest outside source for funds will come from bonds, bank loans, or other debt. Last year, 6% of the money used came from this source. This year 9% has to come into corporate coffers via this route.

Essentiality—This is a factor that hasn't appeared since World War II. It shows up now because Uncle Sam once again will be deciding who can make or build almost anything. Certificate of necessity will be sought for about 40% of the capital spending program. Just how much capital programs would be cut back if a certificate is not obtainable is anybody's guess. Many companies, though, say they will go ahead regardless.

Stepup—About half of all businessmen thought that the year's defense needs would bring out a further rise in expansion plans.

has a good chance to roll along at a fast clip. A lot of new machines are needed to speed the flow of war goods and essential products. And even purely civilian industries can make a good case for keeping replacement and modernization at a high rate.

While the main bottleneck right now is in materials, the bottle is going to be all neck in manpower. Skilled workers already are at a premium. New machinery releases a large number of workers who can be used to expand production further, but arms production is going to need more workers soon—lots of them.

At first blush, the 277% spending increase over 1950 for transportation equipment looks like an almost impossible total to reach. But aircraft, railroads, and water transportation are high on the list of those already granted certificates for rapid amortization (BW-Mar. 17 '51, p26). With the government giving the green light, even a Controlled Materials Plan will not put the damper on the huge program.

• **Nonmanufacturing**—In the nonmanufacturing field, mining stands out as the largest gainer over past performance. Expenditures are set to go from the \$700-million actually spent in 1950 to \$1.1-billion this year. And that figure may have to be revised upwards later in the year.

Nonferrous metals expect a boost in spending of about 175% over last year. Aluminum alone accounts for most of this. Certificates of necessity for alu-

minum plants already granted (for 80% amortization) total \$400-million. Even though all that money can't be spent this year, it is an indication of the importance attached to stepping up metal output.

Enlarging Capacity

The capital spending program now in the works is so tremendous that by the end of 1951 the nation's industrial capacity will be 9% greater than it was last year. That is, if industry is given a free rein.

Since 1948 the physical capacity of the economy has already gone up 12%. And by the end of 1951, the economy would have the plant to turn out 22% more goods than could have been turned out just two years ago.

• **Everybody's Expanding**—One important thing to keep in mind in trying to appraise industry's spending intentions is the almost unrealistic size of the increase. Many companies that have not had any plans for expansion or replacement at all have suddenly decided to get on the bandwagon. And some firms that have had long-range plans have just as suddenly decided to telescope them into one year.

So even if the majority of programs did not have Washington throwing curves to baffle them, it would still become a problem in logistics. You might plan now to put in that new wing or replace those old machines this year. But even if the order is filled, it might not all come through this year. Some expenditures figured for this year's budget might run over to 1952.

Who's Expanding

Last year the lion's share of the investment dollar went into replacing worn out equipment. The current investment superboom concentrates on adding new plant. But the percentage of the capital budget going into expansion varies greatly between industries, just as in past years.

Chemicals again lead off as the industry spending the largest amount of money for expanded output. Last year the chemical industry planned to lay out 60% of its plant investment for expansion. When things picked up, more and more of the spending went into new facilities.

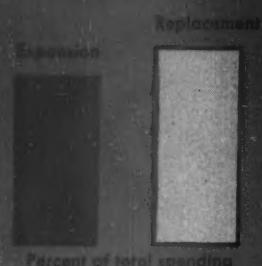
At yearend, three-quarters of the total was for new capacity. For 1951 the industry plans to earmark 80% of its capital investment for more plant.

• **Low to High**—Biggest switch comes in the transportation equipment field. Last year this industry was low man on the totem pole. Spending on capital goods for expansion took only 25% of its capital spending dollar.

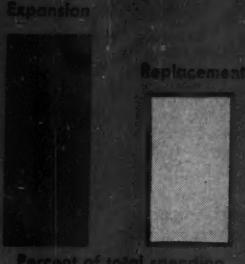
Now it's top dog. Present plans call

Expansion Is the Thing

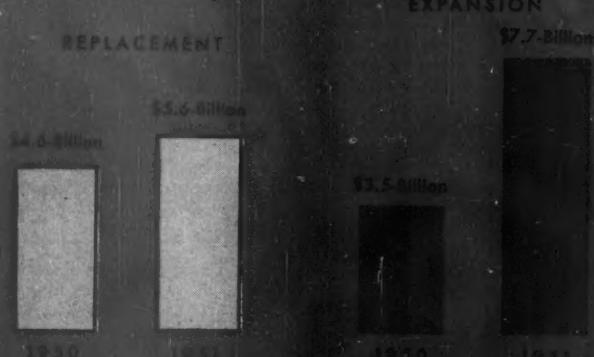
3. Last year expansion
was secondary to
the replacing
of equipment.



2. This year expansion
is what companies
are spending money for



3. But for both, 1951 spending will run well
ahead of last year



4. Here's the trend now, industry by industry

Industry	Expansion spending, as a percent of total spending	
	1950	1951
Chemicals	74%	80%
Autos	51	51
Food	36	41
Petroleum Refining	20	27
Machinery	31	48
Steel	47	67
Textiles	22	24
Electrical Machinery	4	50
Transportation Equipment	25	81
Other Manufacturing	36	62
All Manufacturing	48	58

for shelling out 81% of the capital budget for additions to plant. That makes the percentages look like the figures on a runaway adding machine. The goal for expansion is to spend 1,103% more than was spent last year for the same purpose.

Reason behind the jump is mainly aircraft. But the enlargement of all other transportation facilities, plus the big freight car program, weigh in heavily.

Even though expansion is the thing, industry has not forgotten that modernization of equipment is a major factor in boosting output.

Except for the transport group, which is using practically anything that will stay bolted together, every industry is planning to spend more for replacement and modernization than last year.

If you were to cover up the expansion spending and just look at spending for replacement, it would still look like a lusty boom: chemicals, up 22%; petroleum, 44%; machinery, 12%; textiles, 42%.

But when you look at the expansion side of planned spending, the true character of this boom is unmistakable: chemicals, up 71%; textiles, 60%; machinery, 129%; steel, 234%.

• **Same Yardstick**—One thing to keep in mind is that you have to look at the expansion share of the investment dollar with the same glasses you use for scanning total capital expenditures intentions. In normal times, if business picks up after industry has made its capital spending plans, it revises its intentions upwards—and so, too, the share going into expansion. And vice versa. If things get tough, business digs in dollarwise by cutting spending, and even more percentagewise with cuts in expansion plans.

And this year there is an added factor. Business has to keep one eye cocked on the domestic economy and at the same time take the measure of international events. This boom is supported by armaments. And right now, military rearmament is the tail that wags the dog. The more that has to be spent on rearming, the greater the capital spending of industry will have to be. And any cutback in the program will wash all the way back to the investment and inventory policies of industry—and alter the shape of the business cycle itself.

Building Comes First

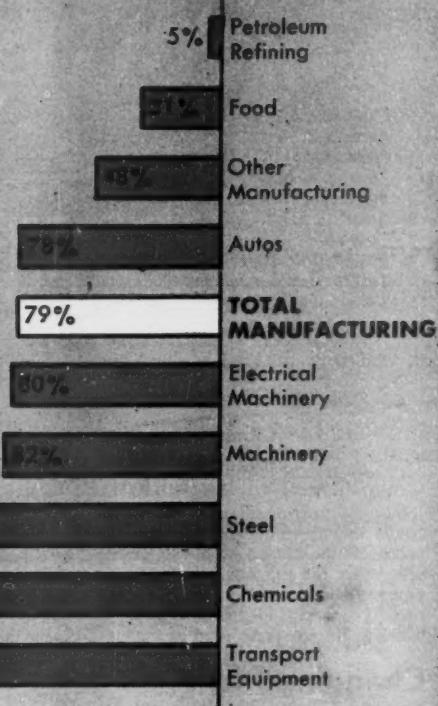
Since the capital investment drive is centered on expansion, the initial surge will show up in bricks and mortar—the frame to hold the equipment.

Industry's construction plans document the industry-by-industry differences in percentages going into expansion and net additions to capacity.

Brick & Mortar:

This year companies are putting up brand new plants—not just improving old ones

Percent increase in construction spending
1950-1951



Data: McGraw-Hill Survey

© BUSINESS WEEK

Those industries that expect to lay out more for replacement and modernization of equipment are relatively low in construction plans. Thus petroleum refining, which expects to raise capacity by only 3%, is thinking of exceeding last year's building program by 5%; food, with a capacity enlargement of 6%, is aiming for a construction total 31% over a year ago. At the other extreme, the flowering transportation equipment field, which is planning to approximately triple spending and boost capacity by 38%, is shooting for a 288% increase in construction expenditures.

• **Competition**—Over-all, manufacturing industry is striving to spend 79%

more on construction than it did last year. That explains why government is bent on knocking down home building 40% from last year; and also why the building materials manufacturers are trying to spend 52% more despite the proposed cut in home building.

For the first two months of the year, private industrial construction was up 89%. And industry was competing against every other type of construction for supplies. Practically everything was way over a year ago. Even commercial construction was 56% ahead. Now with a strict control on commercial buildings, fewer materials will be diverted to stores, office buildings, and other commercial structures in the future.

of plant and equipment expenditures is tied up in requests for fast amortization that have already gone to the Defense Production Administration.

The higher tax rate and the excess profits levy are going to take a lot of juice out of earnings after taxes. The stockholder's belt, too, is already pretty tight. Last year the owners of the corporations got 42% of net income as dividends. Even at the peak of World War II, dividends were 44% of net income.

The stock market still does not lure the financial managers. Not even a high stock-price level and the greater need for funds are enough to make corporations float an appreciable quantity of stock. New stock issues will account for only 1% of all the money manufacturing industries will need this year.

• **Different**—Exceptions to the general rule of using mainly retained earnings and depreciation reserves are the transport equipment field and the railroads.

Transportation equipment expects to get only 49% of its money from profits and depreciation funds. The other 51% is coming from the government or

How to Pay the Bills

Financing the 1951 capital spending program will require much more money than ever before. Business is going to get most of it from the same place it usually does: internal funds.

For all manufacturing, depreciation and retained profits will supply about 86% of all funds. That is not much

of a drop from last year's 92%. But, because of the larger volume, it represents much more money.

• **Government Aid**—The government policy of allowing rapid amortization for essential production will free a substantial part of corporate income for capital use. Over \$10-billion worth

Where will the money come from?

PERCENT OF EXPENDITURES TO BE FINANCED FROM:

	Depreciation and retained Profits	Sale of Stock	Bonds, bank loans or other debt	Government or government- guaranteed loans	Other
Chemicals.....	91%	3%	0%	0%	6%
Autos.....	99	0	1	0	0
Food.....	83	0	16	0	1
Petroleum refining.....	97	0	1	0	2
Machinery.....	85	2	7	1	5
Steel.....	91	0	8	0	1
Textiles.....	88	0	12	0	0
Electrical machinery.....	97	0	2	0	1
Transportation equipment.....	49	0	0	51	0
Other manufacturing.....	79	0	20	0	1
All manufacturing.....	86	1	9	2	2
Railroads.....	47	0	46	0	7

Data: McGraw-Hill Survey.

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government-guaranteed loans. The huge Air Force aircraft program is the reason for that.

The railroads usually lean heavily on bonds to raise money. This year the pattern is the same. At the beginning of last year, the railroads expected to use profits and depreciation for 68% of the needed money. This time only 46% will come from these sources.

Changing Plans

Just what happens to industry's plans when a shift in business occurs can be seen by comparing business plans at the beginning of 1950 and what business actually spent.

Business in the first half of 1950 was good. But the second half—with the Korea invasion—was booming. Prospects changed, and spending plans were revised upward to meet them.

• **Industry Score**—For all industry, spending exceeded original intentions by 20%, but it varied widely from industry to industry.

The electric and gas utilities (which are in the middle of a long-range expansion program) stuck pretty much to what they had planned for—good business or no. Most of the others ranged up to 30% better. None spent less than they said they would.

The railroads decided their original plans were too modest—so boosted spending by 60% (this year they are pushing that total up another 45%).

The 1950 experience of plans changing may be repeated. But the pattern of change might be entirely different. No one knows now exactly what capital spending actually will be this year. But it is still safe to say that 1951 will be a banner year.

Facts About the Survey

The capital expenditure survey made by the McGraw-Hill Dept. of Economics is a report on the spending plans of industry for 1951. It does not tell what ought to be spent for new plant and equipment. It is solely a report on where and how industry intends to spend on capital goods.

• **Coverage**—The companies cooperating in this survey employ more than 60% of all workers in industries where capital investment per worker is highest. That includes chemicals, oil, railroads, electrical machinery, autos, utilities, and steel. Over-all, they make up about three-quarters of all spending for capital goods. The companies included in the sample were mostly the bigger companies in these industries.

In other industries, coverage was not so complete. But the participating companies were carefully picked to make up a representative cross section.

In all, the sample includes companies

employing about 5-million workers. That is about one-quarter of the total employment in all industry.

Physical capacity was measured by figures supplied by the cooperating firms themselves. All companies were asked to select their own measures of physical output. A steel company may use ingot tons, for example, while an aircraft engine maker compares the rated horsepower of the engine he produces. The results are the only available direct measures of the expansion in industry since before World War II.

The findings of this survey are not exactly identical with the reports of the Dept. of Commerce in its estimates of gross national product. Commerce estimates include spending by the retail and wholesale trade; spending on farms, hospitals, and schools; and capital spending charged to current expenses. The McGraw-Hill survey excludes all of these. But the trends are the same in both.

• **Shrinking Dollar**—The McGraw-Hill study makes no allowances for the change in the value of the dollar. The totals reported by industry are compiled exactly as they are given. Therefore, to obtain the actual physical difference between one year's spending and another's, you must remember that the value of money has shrunk.

Capital spending for the electric utility companies was obtained through the cooperation of Electrical World, a McGraw-Hill publication. Correspondents of BUSINESS WEEK personally interviewed many company executives. Other McGraw-Hill magazines helped in conducting the survey in their own particular fields.

REPRINTS AVAILABLE

Single copies of this Report to Executives will be available in about three weeks to BUSINESS WEEK subscribers upon request without charge. Other copies will be billed at the following rates: 1 to 10 copies, 20¢ each; 11-100 copies, 16¢; 101-1,000 copies, 12¢; over 1,000, 10¢. Address orders for reprints to Reader Service Department, Business Week, 330 West 42nd Street, New York 18.

Buried in work?

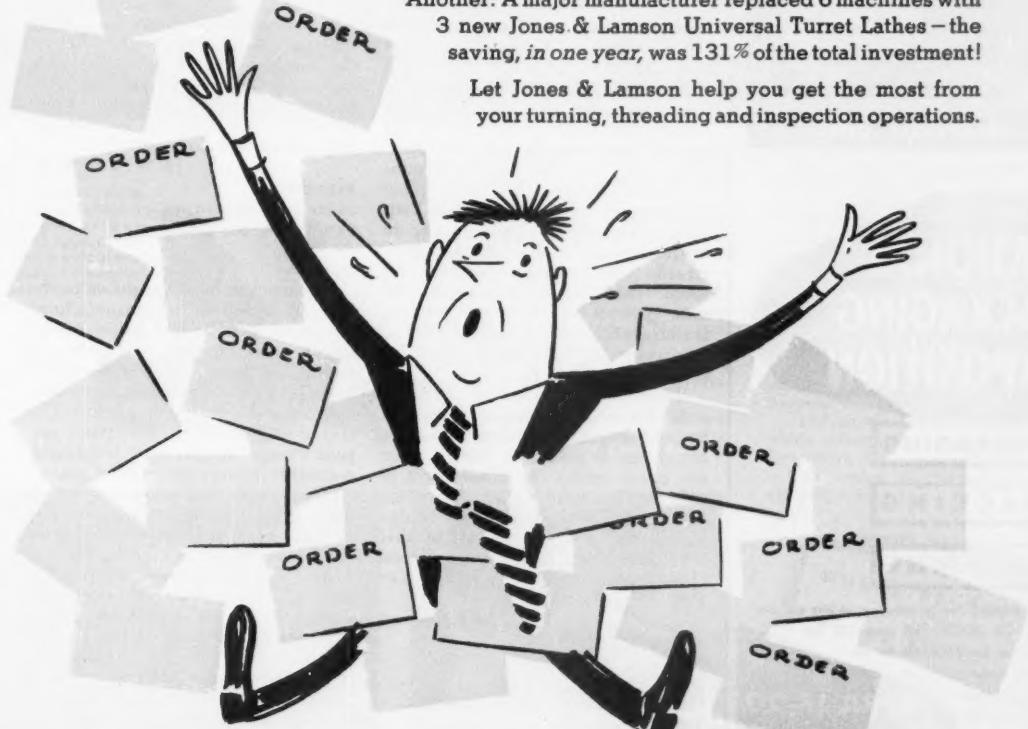
Are defense orders causing you to worry about "bread-and-butter" business? Do you need to get more out of your existing manpower?
Then you need modern machine tools!

No matter what the age of your present machines, a new Jones & Lamson machine may increase your production enough to pay for itself in just a few months.

Example: A \$5,150 investment in Jones & Lamson Optical Comparators returned to one company a \$12,000 annual saving!

Another: A major manufacturer replaced 6 machines with 3 new Jones & Lamson Universal Turret Lathes — the saving, *in one year*, was 131% of the total investment!

Let Jones & Lamson help you get the most from your turning, threading and inspection operations.



Turret Lathes — Fay Automatic Lathes — Thread
Grinders — Optical Comparators — Threading Dies

**JONES &
LAMSON**

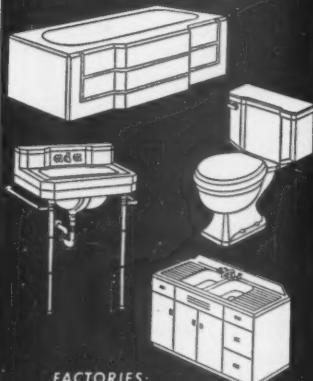


MACHINE COMPANY
Springfield, Vermont, U.S.A.

MACHINE TOOL CRAFTSMEN SINCE 1835

MANUFACTURERS OF
FINE PLUMBING FIXTURES
SINCE 1904

ELJER



FACTORIES:

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AMA'S 20th

NATIONAL PACKAGING EXPOSITION

PACKAGING

PACKING

SHIPPING

For everything vital in packaging, packing and shipping! 250 exhibitors will present for your inspection and comparison the machines, equipment and services that mean lower costs, more sales and greater operating efficiency.

APRIL 17-20

CONVENTION HALL
ATLANTIC CITY

For information about the exposition and concurrent conference . . . address the American Management Association, 330 West 42nd Street, New York 18.

American Management Association

READERS REPORT

Staying Put

Sirs:

Regarding your article [BW—Mar. 3 '51, p94] about Boston Market being changed—please use your influence not to let Boston change good old Durgin-Park, the best eating place in the country.

DONALD W. HERMAN

TOLEDO, OHIO

• Durgin-Park, famous old Boston restaurant, intends to stay put. Neither the removal of Faneuil Hall Market nor the Central Artery will have any effect upon it.

Unequal Cuts

Sirs:

I heartily agree with Secretary Snyder's intention of closing the hole opened by the income-splitting provision passed in 1948 [BW—Mar. 3 '51, p62].

However, the most important point has been overlooked, at least for public consumption, both at the time of the original campaign to get the split-income provision and now. The most significant change that took place when the provision was set up was that, while presuming to apply equally to married couples at all levels of income, actually the provision provided for sizable reductions in income tax for those persons in the upper income brackets, while making possible little or no income tax reduction for those in lower income brackets.

This amounted to changing the whole policy behind the graduated income tax rate system without professing to make any change in policy. If there is to be any action having the broad effect of reducing the degree of graduation in the income tax schedule, it should be discussed and presented openly in that light rather than disguised as a general across-the-board reduction as it was in 1948.

WILLIAM S. DUBOIS

AKRON, OHIO

Family Affair

Sirs:

You make the statement [BW—Mar. 10 '51, p62] in connection with the operation of the various GM divisions that "a Delco executive recently complained that Chevrolet was buying only 40% of its shock absorbers from his division."

The above quotation is an erroneous statement of the facts of our business

with the Chevrolet Division. Delco at the present time enjoys all of the shock absorber business with Chevrolet on a competitive basis and never has at any time been limited to 40%.

J. N. TILBROOK

GENERAL SALES MANAGER,
DELCO PRODUCTS,
DAYTON, OHIO

Pro Propane

Sirs:

Your item under Production Briefs with relation to the difficulty of South Jersey Gas Co. [BW—Feb. 17 '51, p64] is very misleading.

Here on the East Coast, many gas utility men have been dubious about natural gas, and particularly about the ability of propane as a substitute, due to insufficient knowledge and their inexperience with both products.

A propane-air gas with the proper Btu. can be used as a substitute for the average natural in practically every case where natural is operating satisfactorily. Literally hundreds of installations among industries and utilities will back up this statement.

H. W. TOWNSEND

PRESIDENT,
DRAKE & TOWNSEND, INC.,
NEW YORK, N. Y.

Sirs:

The pipeline break caught us in the midst of conversion from manufactured to natural gas. Approximately 64,000 gas appliances in use by 38,000 customers had been converted to natural gas. Our manufactured gas plants were still operating to supply another 22,000 of our customers. Emergency propane storage facilities were temporarily connected to supplement natural gas.

The initial mixture of propane-air gas resulted in faulty operation of many gas appliances, and about 5,000 service calls were made during the first 48 hours. For the balance of the seven days of interruption of natural-gas service, most gas appliances worked satisfactorily without further adjustment.

Our water gas manufacturing plants are now being converted to make high Btu. oil gas, which can be mixed with propane to provide a gas that is satisfactorily interchangeable with natural gas. Our experience, like that of other gas utility companies, proves that this can be done satisfactorily.

V. F. STANTON
GENERAL COMMERCIAL MANAGER,
SOUTH JERSEY GAS CO.,
ATLANTIC CITY, N. J.

How Much of Your Baltimore Shipments Winds Up Here?



Attractive Mrs. Dean, wife of a Mississippi delta cotton farmer, shops for her smart apparel and beauty aids in the stores of Memphis and New Orleans.



Living room of the Nebraska farm home of the Johnsons, Country Gentleman readers, was designed and furnished with the help of an Omaha department store's decorating service.

You ship to distributors in big cities like Baltimore—but where do the distributors re-ship your goods?

Retailers who buy from your distributor sell your goods to customers living—where?

Remember . . .

Every third dollar is spent at retail by rural families (like the Bishops, Country Gentleman subscribers whose Maryland farm is shown above).

Over half of all big volume grocery stores are in places of 25,000 population or less.

Drug stores with the most rural business are making the greatest profits.

Even in big-city shopping cities, 57% of all "shopping line" goods are purchased by customers living outside cities.

You already have distribution into established outlets serving Rural America. You can expand profitable volume—by advertising directly to rural families in their rural magazines.

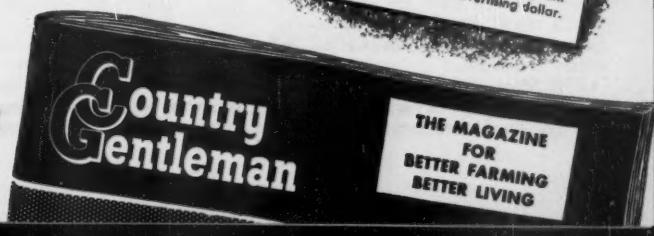
Through Country Gentleman, you reach 2,300,000 of the most prosperous rural readers coast to coast—with greatest impact, proved by a recent nationwide survey. Find out what happens to your own big-city shipments . . . and join the hundreds of advertisers whose investments have made Country Gentleman 1st among farm magazines—12th among all magazines—in advertising revenue.



Big grocery orders of Country Gentleman readers, the Beldens of Massachusetts, are regularly delivered to their farm door from a store in town.

WHERE PEOPLE BUY VS. WHERE BUYERS LIVE

The selling problem is concerned with Where People Buy—the location of retail outlets. The advertising problem is concerned with Where Buyers Live—reaching them with messages in their homes. Manufacturers who understand and act on this difference get more profit from every selling and advertising dollar.



GREATER POWER TO MOVE PEOPLE
GREATER POWER TO MOVE GOODS

MARKETING



ALLIED'S PUCKETT meditates on the nature of his chain: "Part department store, part Sears, is about it, I guess."

Stern's Is What Allied's Waited For

Department store chain is near to closing deal that will give it first outlet in Manhattan, boost sales volume \$35-million a year.

Allied Stores Corp. is very close to getting its first foothold in Manhattan. It has waited a long time for it—23 years to be exact.

This week the nationwide chain was dickering to buy the big Stern Bros. department store on 42nd St. and Sixth Ave. The deal has been pending for weeks, but up to this time no one would confirm or deny it. Now, although details still have to be worked out, it looks certain to go through.

• **Wouldn't Build**—Allied could have had its Manhattan store—by building it years ago. But it never seriously considered doing so; it doesn't operate that way. Allied is basically a holding and managerial operation that buys stores and bundles them under one top management. What it wanted in New York was a major, going midtown store. The fact that important midtown stores don't go on the block very often explains why it had to wait so long to get one.

Allied's opportunity came in December, through the death of William O. Riordan, Stern's late president, who owned between 40% and 45% of the store's stock. Riordan's estate wanted cash, and that for Allied was all the entree it needed.

• **75th Store**—If the deal does come off, the chain, through an exchange of stock, will get its 75th store and will add

some \$35-million annually to its overall sales volume. Already the No. 1 U.S. department store chain in terms of sales volume—\$437-million last year—Allied will now pull well out in front of its closest rivals, May Department Stores (whom Allied edged out a few years ago) and Federated Department Stores.

Stern's would become Allied's second-largest outlet. First place would still go to Boston's Jordan Marsh, the nation's fourth-largest department store, with a sales volume better than twice Stern's. The new Manhattan acquisition would fall into about the same slot as three other major Allied stores: Joske Bros. (San Antonio), The Bon Marche (Seattle), and B. Gertz (Jamaica, N. Y.).

• **Throwback**—In a way, the Stern deal is a kind of throwback to the 1920's, when Allied was formed.

The big era of department store formation came between 1880 and 1900. These early stores were largely family-owned enterprises. By the 1920's the original owners were well along in years. There were problems of carrying on the business and—as one concludes from the Riordan case—of inheritance and estate taxes. The way was opened up wide for the bankers, who were behind the accumulation of Allied and similar chains. (Allied has

long had close ties with Wall Street's Lehman interests. The chain's board chairman, B. Earl Puckett, is a director of Lehman Corp.; Paul M. Mazur, a partner of Lehman Bros., is a director of Allied.)

Incorporated in 1928, the Allied chain was then called Hahn Department Stores after its first head, Lew Hahn, now general manager emeritus of the National Retail Dry Goods Assn. The name was changed to Allied in 1935, after Hahn's departure.

In point of outlets, Allied's growth has been far from even. Like many other chains, it picked up a miscellaneous batch of stores varying from very large to very small. At one time Allied had about 80 all told. But the chain has since sloughed off some of these, partly by outright sale (as in the case of some small Rocky Mountain stores), and partly by merger. At the same time it has acquired still other outlets.

• **Departure**—In at least one respect, however, the Stern deal departs from the usual Allied pattern. In every other case, Allied owns 100% of its stores' stock. In Stern's it won't.

Under the present plan, Stern's will use its own money to buy up the Riordan family holdings at \$24 a share. This stock will be retired. Practically all the remaining Stern stock—held mainly by the Manufacturers Trust Co. (about 40% to 45%) and Thomas W. MacLeod, current president of Stern's—will then be exchanged for Allied stock on a two-for-one basis. A few shares of



The bundle of sticks

A wise old man called his quarrelsome sons about him. Taking up a bundle of sticks, he commanded each in turn to break the sticks. All tried, but in vain, and said it could not be done.

"And yet, my boys, nothing is easier to do," said the father, as he undid the bundle and broke the sticks, one by one. "By this example, you can see that united you will be more than a match for your enemies; but if you quarrel and separate, your weakness will put you at the mercy of those who attack you."

The useful truth of this fable is just as timely today as it was when the Greek ex-slave

Aesop told it 2,500 years ago. You, a patriot, believing in individual liberty and freedom for all, see our American way of life threatened by the menace of communism abroad and jeopardized at home by complacency, negligence, confusion and incompetence.

As a business leader in your own community, you have a particular responsibility to help unify your fellow citizens and guide their thinking and action--for the strengthening and preservation of the ideals that built America, in fact, made America the envy and goal of the very individuals now seeking to destroy it. In Union there is Strength.

The Youngstown Sheet and Tube Company
 General Offices—Youngstown 1, Ohio
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MANUFACTURERS OF CARBON ALLOY AND YOLOY STEELS



RAILROAD TRACK SPIKES - CONDUIT - HOT AND COLD FINISHED CARBON AND ALLOY BARS - PIPE AND TUBULAR PRODUCTS - WIRE - ELECTROLYTIC TIN PLATE - COKE TIN PLATE - RODS - SHEETS - PLATES.



BOOTS FOR the Atomic Age

AND right for the times! They are decontamination boots made of American Anode plastics and worn over regular Army issue shoes. They are protection against all kinds of chemicals, including radioactive materials and, of course, are made to be disposable after one wearing.

They resist grease, oil and acids. They are flame proof and fight abrasion of stones and rough terrain.

Here's another indication of the range of items that American Anode can produce. Virtually anything that can be made from, or improved by the use of plastics (vinyl plastic paste) can be designed and made for you by American Anode.

Wide Range of Products

These decontamination boots are just one example—for American Anode makes plastic gloves, sinus masks, rubber-coated chains, bellows, many items that will fit into a defense economy.

American Anode takes over design, manufacture and delivers the finished product. If you're interested, write Dept. AF-2, American Anode Inc., 60 Cherry Street, Akron, Ohio.

What can
AMERICAN ANODE
do for you?

CRUDE AND AMERICAN RUBBER LATICES, WATER CEMENTS AND SUSPENSIONS, AMERAN RESIN PASTES, COMPLETE MANUFACTURING FACILITIES

Stern stock, however, will remain outstanding.

Allied does not get title to Stern's property. The deal includes only Stern's business. The store itself is owned by an unnamed Boston individual, who bought the property a few months ago and leased it back to Stern's on a long-term basis (BW-Dec. 9'50, p86).

• **No Changes**—In taking over Stern's, Chairman Puckett says he will make no changes in management. In this he follows to the letter the edict laid down by Lew Hahn early in the game: "Our central organization exists to supplement, not to supplant, local management" (BW-May 1'50, p28).

This policy follows, too, the practices of other department store chains. Back in the 1920's, merchandisers, seeing what happened to local stores taken over by chains in other fields, worried about their own fate. The fear was that the stores would lose their individuality.

The threat never materialized, however. For the most part, the new chain owners knew that they had a good thing. They were able to effect a compromise type of operation whereby the stores retained their original character and at the same time gained the advantages of chain operation.

Even when Allied merges properties, as it did with three stores in Cleveland recently (BW-Aug. 20'49, p65), it seeks to keep the individuality of each original store intact.

• **Independent Units**—Allied operates its stores as independent units under general supervision on top policy from headquarters in Manhattan. There is some, but not a great deal of, shifting about of executives from one store to another. Each store sets its own advertising and sales policy.

Day-by-day supervision of the store operations is in the hands of the six Allied vice-presidents who act as "group directors." Puckett calls them one-man boards of directors. These men handle a segment of stores grouped according to size, character, and location. They are on the road continually, reporting back to Puckett and to Allied's president, C. E. McCarthy.

• **Central Office**—The central office, with its 500 people, serves in several capacities. For one, it acts as a resident buying office and gives general buying advice when asked for it. Headquarters buyers are also out in the market, picking up what they can advantageously. But the stores don't have to buy through Allied; they, too, are out buying on their own.

Only on women's medium-priced and inexpensive dresses does Allied depart from its rule of local autonomy. The stores are required to turn in regular

reports on their stocks of these dresses to H. Q. Buyers in New York keep 40,000 dresses in inventory (the stock turns over every two weeks) and ship dresses out automatically, according to their estimate of the store's needs.

• **Perfect Fit**—Stern's fits in admirably with the general pattern set by Allied.

Puckett characterizes Stern's as a "middle-of-the-road store." It is neither a Hearn's nor a Gimbel's. Nor is it, on the other hand, the sort of high-fashion outlet you have in Lord & Taylor's. Allied itself is in the same general category. Puckett's description of his chain is "part department store, part Sears."

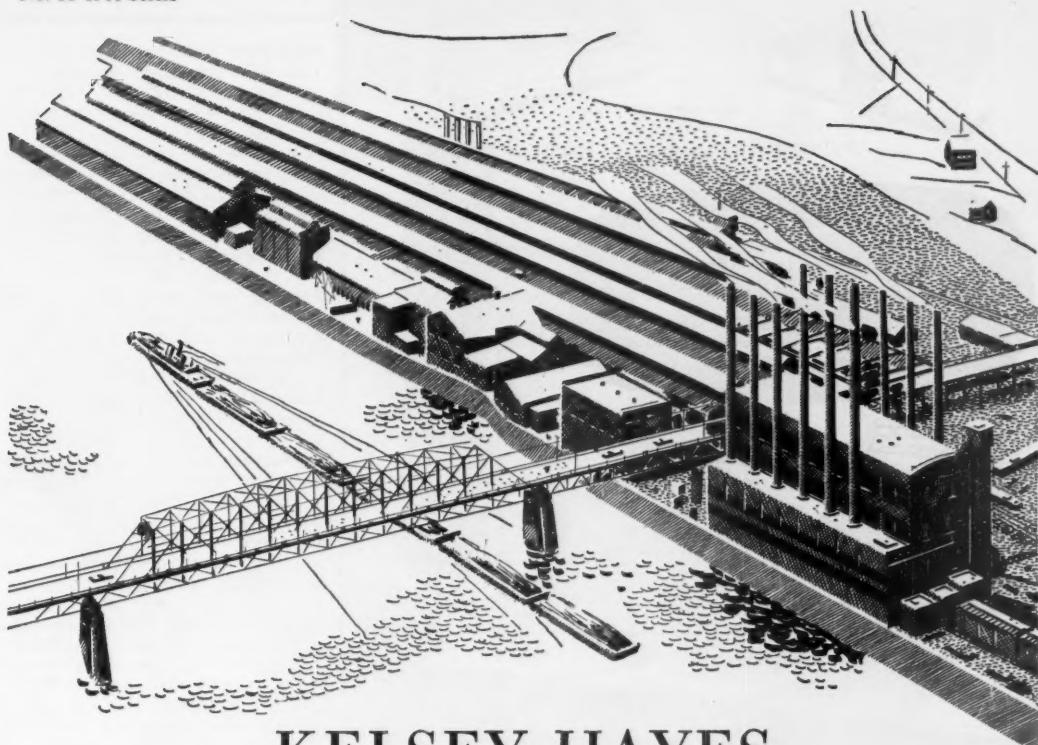
It follows from the Sears analogy that a major portion of the New York staff's work is involved with private brands. For example, Allied has a house line of men's clothes—Kentcraft—for which it buys the piece goods. It ships these to manufacturers on a contract basis. It also works in much the same fashion with a long line of products, including refrigerators and other private-brand appliances.

Puckett's philosophy on private brands can be boiled down to this: "Allied is not interested in competition between private brands and national brands. It believes that each supplements the other." Generally speaking, the national brands supply Allied stores with their quality items, the house brands with their low-end lines. Puckett looks on Allied's private brands as competitive with Sears and J. C. Penney.

• **Executives**—Because of the dual nature of its operation, Allied finds that executives don't come ready-made for it. So it trains them. Three of its six group directors, for example, were once young Allied trainees. Ideally, Puckett thinks, "it's the job of every boss to train his associates." But he knows things don't work out this way, so he relies on his training program to fill the gap.

• **The Boss**—Puckett, now 53, got into merchandising through the back door, as a certified public accountant working in department stores. The transition was natural for Puckett. "I am more interested," he says, "in bringing figures alive than in working with them for their own sake. I like merchandising and selling and have a natural aptitude for it."

Puckett did a five-year stint with Associated Merchandising Corp. (of which rival Federated is a member) in research and analysis. He then went to Frederick Loeser's in Brooklyn as treasurer in 1928, wound up as president of the store. He moved to Allied in 1933, became president a few months after his arrival, and finally became board chairman—a newly created post—early last year.



KELSEY-HAYES

*Establishes Large Wheel-Making Plant
in Pennsylvania*

The Kelsey-Hayes Wheel Company already is turning out a million wheels a month in its big new plant near McKeesport, Pennsylvania. By expanding close to its steel source, Kelsey-Hayes has reduced its shipping problems and lowered its production costs substantially.

PERRY WILLIAMS, Executive Vice President of Kelsey-Hayes Wheel Company said: "The location of one of our major plants in the Pittsburgh area is beneficial to our operations. The deliveries of steel used in our operations and also the return of scrap to the mills both can be accelerated because steel plants are nearby. In addition, from this loca-

tion, our production can be shipped very quickly to the eastern assembly plants of the automotive industry."

Similar success stories are being repeated all across Pennsylvania as important industries build new plants or expand their present facilities in this profitably-located area. Pennsylvania's many advantages would doubtless mean a more profitable operation for your company, too. You can get information on markets, raw material sources, plant sites, transportation facilities, labor, and taxes by writing to: Pennsylvania Department of Commerce, Harrisburg, Pa.

COMMONWEALTH OF

Pennsylvania

DEPARTMENT OF COMMERCE
HARRISBURG, PA.

John S. Fine, Governor . . . Andrew J. Sordoni, Secretary of Commerce

MARKETING BRIEFS



OVER 400 MODELS in the Tyler line of Commercial Refrigerators of all types!

This 28-page illustrated booklet gives complete data on Tyler facilities—part of which will be available for defense work.

The regular Tyler line meets every essential food refrigeration requirement for food stores, restaurants, hotels, institutions. Recent developments include open, refrigerated display cases with High Level Refrigeration and other Tyler features—for fast, self-service merchandising of meats, vegetables, dairy products. Save time for clerks—save time for customers!

FOR DEFENSE
PRODUCTION
FACILITIES
—wire, phone or write
Tyler Contract Dept.
today!

TYLER

Tyler Fixture Corp., Contract Dept. BW-32, Niles, Michigan



Bond Stores' Fifth Ave. branch in New York will open a new department to sell curtains and draperies. This is the chain's first entry into the home furnishings field.

Army surplus stores in Philadelphia are selling combat boots, shirts, and blankets back to the Army. Shortages due to strikebound woolen mills are cited as one reason for the action.

Furniture and appliances broke sales records all along the line last year, according to American Furniture Mart. Household appliances led the line with a sales total of \$3.6-billion. Furniture followed at \$3.5-billion. Radio and TV grossed \$3-billion.

Phonevision may get a crack at the Canadian market. E. F. McDonald, Jr., president of Zenith Radio Corp., is conferring with Canadian Broadcasting Co. officials on the possibility of offering TV programs over telephone lines to Canada's 30,000 set owners.

National Tea Co.'s Chicago warehouse will soon be turning out parts for J-47 jet engines. The food chain bought the war-surplus plant back in 1948 to use as a warehouse. But the contract had a recapture clause in it. Studebaker Corp. will operate the plant for the Air Force.

TV cutbacks at DuMont's East Paterson (N. J.) plant put workers on a four-day week. Other DuMont plants that are working on government contracts continue on a five-day production schedule.

Out of the red: After taking a \$1.2-million loss in 1949, Justin Dart, president of Rexall Drug, Inc., predicted that the chain would soon move into the black. It did. Net profit in 1950 was \$2-million on total sales of over \$153-million.

A record year gave Sears, Roebuck fifth place in sales among U.S. corporations, grouped it with the top eight in earnings. The company's sales zoomed to more than \$2.5-billion—up 17% from 1949.

FTC hit at Gamble-Skogmo's exclusive-dealing contracts, clamped a cease-and-desist order on the big retail chain. FTC claims the firm coerced more than 1,700 associated retail stores into signing exclusive dealing contracts. Meanwhile, Gamble-Skogmo reported 1950 net earnings of \$4-million—against a loss of \$287,176 in 1949.



close at hand...

The raw materials upon which we draw to make the dependable Davison products are natural resources of our country . . . always "close at hand". On hand too is Davison's years of technical experience and research. Leaders in industry and agriculture take advantage of Davison's "close at hand" assets . . . they know that these are reasons why the Davison "D" means dependability.

Progress Through Chemistry

THE DAVISON CHEMICAL CORPORATION



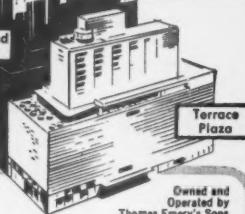
Baltimore 3, Maryland

PRODUCERS OF: CATALYSTS, INORGANIC ACIDS, SUPERPHOSPHATES, PHOSPHATE ROCK, SILICA GELS, SILICOFLUORIDES AND FERTILIZERS

Cincinnati is famous for
Its Magnificently Modern

IPLAZZA
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Terrace Plaza

Owned and
Operated by
Thomas Emery's Sons
Inc., Cincinnati, Ohio

- ✓ 1200 rooms, all outside
- ✓ 7 restaurants famous for fine foods
- ✓ Inside garage
- ✓ Unexcelled convention facilities

GOURMET RESTAURANT

Internationally famous

John G. Horsman, General Mgr.



TRANSFER RECORDS

this easy low-cost way

Over 90,000 leading American businesses have found Liberty Boxes the economical way to store all inactive office records. Made to give years of unlimited service. 25 stock sizes for every popular form. Catalog on request.

BANKERS BOX COMPANY

Established 1919
730 S. Dearborn Street, Chicago III.



CHERRY PIE A LA MODE demonstrates properties of Fiberglas wool insulation. Ice cream, wrapped in Fiberglas, is baked along with the pie—and comes out ice cream.

Fiberglas Takes to the Road



DURABILITY of material shows up when salesman jumps on plastic tote tray.

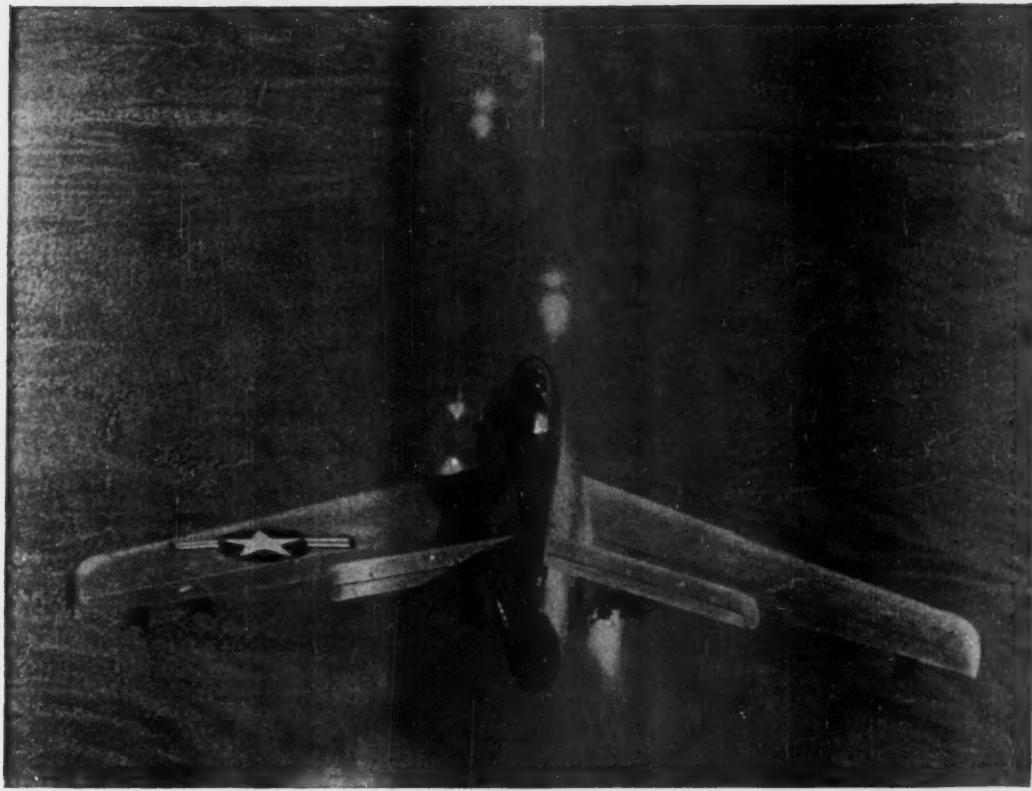
When Owens-Corning Fiberglas Corp. put its Fiberglas Product Demonstration on the road 18 months ago, company officials regarded it as just another way to put across an institutional message.

Now, 29,000 miles, 112 cities, and 33,000 people later, O-C president Harold Boeschenstein says the FPD seems to have done more than all other company advertising and promotion to tell the Fiberglas story to the people who count—those who buy it.

FPD is a combined medicine show, circus, and audience participation show. Five young sales trainees bounce through an hour-long routine, which demonstrates the uses and qualities of Fiberglas.

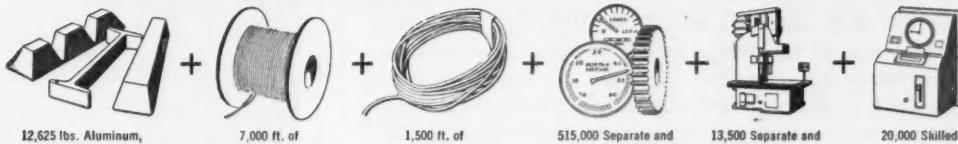
Audiences, rounded up by O-C district sales managers, are drawn from a list of about 130 professional and business categories. Since no one in the audience is an expert on all uses of Fiberglas, the show is done in laymen's language.

The down-to-earth pitch gets results, O-C men can prove. Sample: A Richmond (Va.) architect was listening to a salesman tell him why he should specify Fiberglas-coated duct insulation. When he started to cite the material's noise reduction coefficient, the architect interrupted, "Hell, you're talking about that stuff they rang the bell in. It's O.K. We'll specify it."



F86, USAF

What it takes to send one jet into action!



A giant *jig-saw puzzle*, yes, but it's solved every day by American industry. Thousands upon thousands of intricate parts are produced, assembled and fitted into a perfect finished product. Each part fits and functions smoothly because in America *skill and speed* pay off.

It pays a manufacturer to build a better part, a better product. It pays a worker to do a better job... to take pride in it. Jet or "Jig-saw" the finished product is *bound to be better*.

Owing to security restrictions all figures are approximate

AMERICAN MACHINE & FOUNDRY COMPANY

Executive Offices, 511 Fifth Avenue, New York 17, N. Y.

AMF does it better—automatically!



CREATORS AND PRODUCERS OF ELECTRONIC AND MECHANICAL EQUIPMENT

For the armed services: Antennae and drive units for radar systems • automatic loaders for antiaircraft and naval artillery • elevating and azimuth mechanisms • cooling fans for Army tanks • airplane parts • mobile ovens • electronic training devices • naval ordnance • various special military developments.

For Industry: Tobacco processing equipment, cigarette and cigar making machinery • bakery ovens and machinery • automatic pinsetters, bowling equipment and supplies • DeWalt power saws • Lowerator Dispensers • batch and continuous mixers • stitching machines • Wahlstrom automatic chucks and tappers. • Union bakery equipment.

Milk Price Problem

Should milk concentrate be priced as a fluid milk or a milk product? Agriculture Dept. makes first recommendation in Boston.

Dairymen are running into pricing problems with their new development, milk concentrate (BW-Dec. 2 '50, p86). It doesn't seem to fit conveniently into either of Agriculture Dept.'s price categories—Class I (fluid milk) or Class II (manufactured dairy products).

• Underselling Milk—Fluid milk brings farmers a higher price than milk sold for dairy products. But since milk concentrate isn't mentioned specifically in classification provisions of federal milk marketing orders, it automatically falls into the lower price bracket (Class II).

In Boston, for example, Deerfoot Farms is pricing its concentrate product at 2¢ less per quart than regular milk. Naturally there are howls of unfair competition from producers of regular milk.

• First Ruling—Dairy companies, farmers, and dealers aired their views before the area's federal milk administrator and brought out Agriculture Dept.'s first recommendation on the problem last week. The gist of it is that concentrated milk intended for consumption as fluid milk in the Boston area should be put in the Class I price bracket.

In defense of their stand, dairy



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Design for Carpet Sales

Floor covering dealer Arthur Fleischman of Detroit thought carpet designs could stand some freshening up. So he and the Detroit Institute of Arts sponsored a contest, gave \$2,000 in cash prizes for winning ideas. Here's first prize being inspected by Fleischman (right) and his son Lawrence.

Though Fleischman's store is 7 mi. from downtown Detroit, it handles a \$2-million annual volume, or about 10% of the city's total carpet business.

companies say that they price concentrate below fluid milk in order to stimulate interest in the new product; that as concentrate production gets into high gear, they will be able to produce it at still lower cost. But they confuse the issue themselves somewhat by plugging in their advertising the statement that you can't tell the concentrate from regular milk by taste.

• **Cleveland, Too**—The classification problem is cropping up in other parts of the country, too. In Cleveland last week, the Milk Producers' Federation petitioned for a hearing on the subject, said concentrated milk is being sold in direct competition with fluid milk.

Belle Vernon Co. (subsidiary of National Dairy Products, Inc., which first introduced the concentrate) is selling its concentrate only on a test basis in nearby Ashtabula and Lima. But Cleveland milk producers want to make sure that the classification angle is out of the way before the concentrate hits the market in big quantities. Though USDA hasn't said so, chances are its decision will be the same for both the Boston and Cleveland areas.

California Oranges Regain Their Stature

The California orange blight is over; the fruit is back to standard size, and then some, after years of dwarfishness.

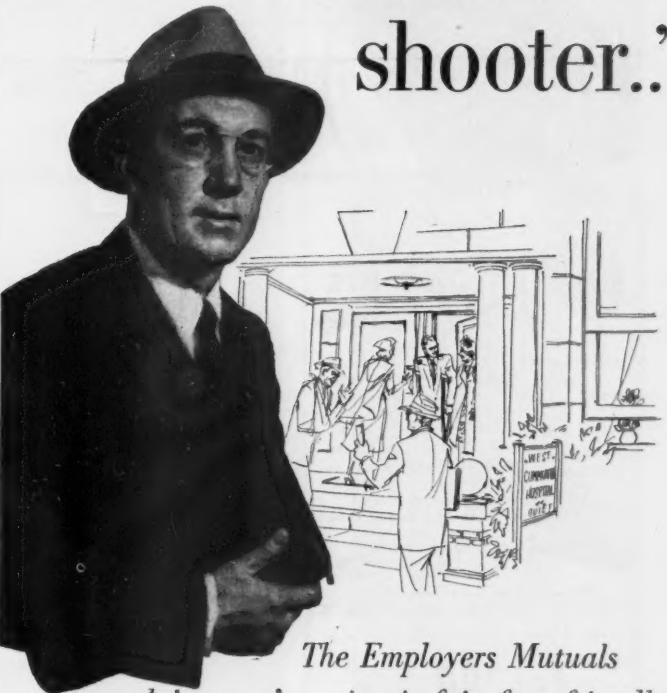
That won't make any difference to your breakfast orange juice, but it means plenty to marketers like the California Fruit Growers' Exchange (Sunkist). The size of the fruit looms large in their budgets; advertising and general operations are calculated on a cents-per-box assessment against the packaged fruit. The smaller the oranges, the more it takes to fill a box, hence the fewer boxes you have to assess.

For the past five years, California oranges have been undersized, and the exchange has had less money to spend on marketing. In the worst years, it took 292 oranges to fill a box. The 23-year average is 272 per box. Last year's crop measured 275 a box, slightly under par.

Now exchange members are happy again. This year's crop of Valencia or summer oranges should hit a whopping 247 by July. The winter crop of navel oranges glowed with health, too. They averaged 167 per box through March. That compares with a 13-year average of 197 a box.

The blight on size that appeared in 1945 has been attributed to the Los Angeles smog. But the most logical explanation seems to be that the small sizes were the result of improper application of irrigation water.

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FINANCE

DENVER & RIO GRANDE WESTERN
No Young stock interest here. Is traditional "bridge line" connecting Western Pacific and Missouri Pacific Lines.

WESTERN PACIFIC R.R.
Young group suing to enforce claimed sale to it of 28.7% of voting stock.

MISSOURI PACIFIC LINES
Young fighting to prevent consummation of approved reorganization plan. If successful would retain voting control of system.

First "Transcontinental"—If

Coast-to-Coast Rail Deal

To some people it looks as though Robert R. Young was on the point of pulling it together. But there are a lot of obstacles.

The depression finished the fabulous Van Sweringen brothers. But it didn't kill their long-cherished plan to set up the nation's first coast-to-coast rail system. Instead, Robert R. Young, who bought what was left of the Van Sweringen empire at hock shop prices in 1937, bought the transcontinental dream along with it.

Since the day he took over, Young has been banging away at the transcontinental project. And today you can find a lot of pro-Young people who say that he is just one jump short of succeeding. You can also find a flock of anti-Young people who say he hasn't a chance in a million.

• **Young's Strategy**—Right now, Young seems to have finally decided just what roads would best serve his purpose (map, above). What's more, he's tak-

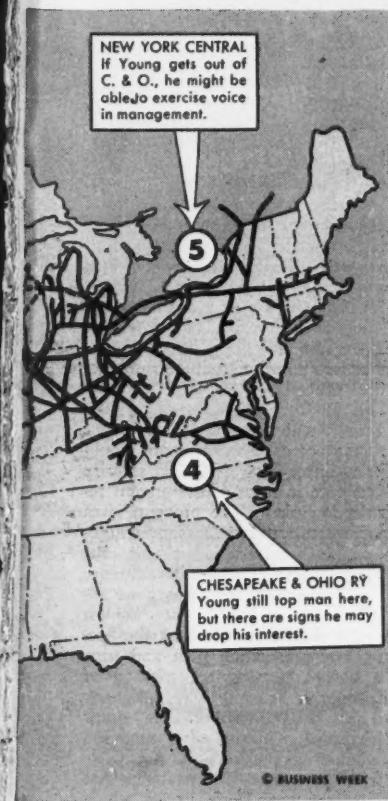
ing steps to cement his hold on a number of them. That accounts for these moves by Alleghany Corp., the Young-dominated holding company:

• Alleghany is preparing for a court battle with the James Foundation of New York, Inc. At stake is the foundation's 28.7% voting interest in the Western Pacific R.R.

• It is taking every possible step to prevent consummation of the Missouri Pacific reorganization plan, which has ICC and court approval (BW-Dec. 9 '50, p82).

• It has sold about half of its holdings in the Chesapeake & Ohio Ry. to Cleveland's Cyrus Eaton, ancient Young ally.

This move cut Alleghany's voting interest in C&O to slightly over 1%. According to the pro-Young faction,



Still Simmers

those moves, plus a few good breaks, are all the transcontinental project needs. The anti-Youngers disagree, but they still aren't selling Young short; they've learned from experience that he isn't beaten until he has lost his last chip.

• **Slim Chance**—To an outsider, with no prejudices about Young either way, the task he has set himself still looks virtually impossible. Even the easiest part of the job—the west-of-the-Mississippi links—looks about as "iffy" as anything can get.

Take the coming court fight over the James Foundation's 55,727 shares of Western Pacific preferred and 153,165 of common. When last voted, this block represented a 28.7% interest in the road. Alleghany Corp. claims that the foundation agreed last month to sell the shares for \$13.4-million, but now refuses to deliver.

The foundation has not yet made public its defense. However, it appears

Patterns in
Pensions

1935 1940 1945 1950

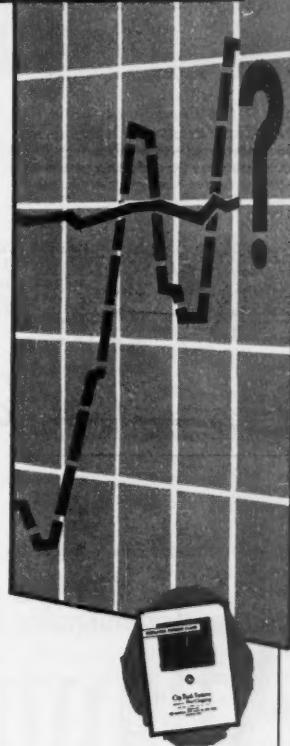
YOUR RETIREMENT PROGRAM SHOULD BE GEARED TO YOUR COMPANY EARNINGS

If your company EARNINGS ARE STEADY

Your company probably can afford the permanent commitment of an adequate pension system.

If your company EARNINGS ARE ERRATIC

Your company probably can best solve the retirement problem through a deferred profit-sharing trust—or a combination of a modest fixed pension commitment plus a profit-sharing retirement plan.



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that the deal was not negotiated directly with Alleghany, but by intermediaries working for "an unnamed buyer." Wall Streeters feel that the present owners aren't happy about seeing the stock fall into Young-dominated hands.

It's still anybody's guess when Alleghany's suit will come to trial. Even if it wins its case, a lot of time could elapse before the stock actually came into its hands. The foundation might decide to appeal any adverse decision.

And in any case, not all the shares in question have been spoken for by Young-dominated purchasers. If all went well, the through-thick-or-thin Young supporters would get only a 22.5% interest. Young is a past master at shoestring control; but even he can't be sure how long he can dominate a corporation without mathematical control.

• **The MOP Fight**—Control of the Missouri Pacific is another shaky spot in Young's plans. His ambitions would suffer a bitter blow if MOP security holders vote in favor of the present reorganization plan. The program gives some recognition to Alleghany's holdings of MOP preferred, but wipes out its almost 500,000 shares of common.

That's why Alleghany has gone all-out to convince the security holders that they should vote to junk the Section 77 reorganization plan and turn to a new Young-inspired method of readjustment. It's also why Alleghany must be deeply interested in quick congressional adoption of a proposed amendment to the Mahaffie Act.

• **New Legislation**—The Mahaffie Act sets certain conditions under which railroads in the custody of bankruptcy courts can effect voluntary reorganization plans outside of Section 77. Any such step must have the approval of the presiding judge; it must also be O.K'd by at least 25% of each class of securities. At present, MOP seems to have little chance of meeting the first requirement. The judge handling the case has shown clearly that he is unlikely to approve any proposals other than the Section 77 plan now being considered.

However, an amendment to the Mahaffie Act that would remove this MOP roadblock has been filed in the Senate. Under its terms, a debtor road would merely have to prove that its earnings were 1.2 times its charges for each of the last seven years. MOP could fit that picture.

• **And in the East**—All these West-of-the-Mississippi difficulties look small compared with the problems Young must solve in the eastern section of his dream rail system.

There are two possible candidates for the honor of providing the eastern link: the Chesapeake & Ohio, and the

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The Master Builders Company became a wholly owned subsidiary of American-Marietta.

CONDENSED CONSOLIDATED BALANCE SHEET NOVEMBER 30, 1950

ASSETS

Total Current Assets	\$17,452,695
Other Assets	862,572
Investments	765,859
Property, Plant & Equipment — Net	7,973,227
Total Assets.....	\$27,054,353

LIABILITIES

Total Current Liabilities	\$6,211,638
Long-Term Debt (less current portion)	3,667,500
Minority Interest	163,477
Net Worth.....	17,011,738
Total Liabilities	\$27,054,353

1950 was a year of substantial progress for American-Marietta and its subsidiaries. We increased our sales and earnings; improved and expanded our operations and continued to diversify our products. Our thirty-seven year record of achievement is clearly identified with the extension of interests in fields having above-average earning power and growth potentials. Our continued plan of maintaining financial soundness and progressive expansion has been advantageous to our shareholders, customers, suppliers and employees. Fortunately, our products are essential to both our civilian economy and our country's defense program. We enter the period ahead with every confidence.

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1940	2,918,177	699,568	1,788,662	136,798	105,145
1945	13,438,657	3,316,102	3,286,279	1,217,467	364,231
1950	44,100,903	11,241,057	17,011,738	5,466,629	3,101,629

1950 Operating Figures Are Pro Forma

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giant New York Central System. Analysts of Young's recent moves believe that he is leaning toward the Central.

Young is chairman of the C&O; for some years he has kept iron control of its affairs. But Alleghany's slice of Chessie voting stock has shrunk drastically from its peak of close to 33%. Otis & Co.'s Cyrus Eaton recently bought 100,500 shares of Chessie common from Alleghany; he is understood now to be the largest Chessie stockholder.

To be sure, Eaton has long been a vigorous ally of Young's and would presumably continue to support him. But in a serious fight for control of the system, both would need strong allies. At the moment, it is doubtful if their combined holdings of Chessie voting stock are more than 2.5%.

• **Out of Chessie?**—It is quite possible that Young would be more than willing to cut loose from C&O. He has had his eye on the New York Central for some time. At his instigation, Alleghany several years ago bought 400,000 shares of Central stock, a 6% voting interest. Later this stock was turned over to Chessie at cost. At the time, Young said that the Central needed an up-to-date railroader—just like himself.

As it turned out, Young was never able to swing any weight in the management of the Central. An ICC ruling held that Chessie was a competitor of the water-level eastern trunk line. The commission therefore ordered the stock to be trustee and voted by someone other than Young.

And Young has never been able to win a place in the Central's directorate.

• **And Into Central?**—There is one method by which Young could probably use the block of Central stock to participate in its management. He could get Chessie to sell the shares back to Alleghany. Then he could divorce himself completely from Chessie and concentrate on the Central.

That's exactly what a number of Wall Streeters expect him to do. They don't think any Chessie stockholders would object seriously. Many C&O stockholders weren't happy to see their road become a Central stockholder, especially when the investment for a time did poorly in the market. Shares that cost Chessie around \$19 had dropped to around \$10 before Korea. Now, they could be sold at a profit of about \$1.37 a share—a total sale price over \$8.1-million compared with the original \$7.6-million cost.

• **Grievances**—C&O stockholders have been annoyed with Young on more counts than the dabbling in Central stock. They didn't like his insistence on building up Chessie as a passenger road,

as well as the nation's largest originator of bituminous coal shipments.

The hostile group felt this move was unnecessary, too costly, and might eventually have ruined the road. They much prefer the managerial policies of Walter Touhy, who took over as president few years ago. They know that Touhy, as an old coal man, will concentrate on this field.

• **Financing Problems**—Some people in the street aren't sure that Alleghany could buy the Central shares without going still deeper into hock. They believe that the recent C&O sale to Eaton had to be made in order to help finance the proposed move into Western Pacific.

Others disagree; they feel sure that Young could easily finance the repurchase of the Central block, and they point out an interesting facet of the Western Pacific deal. Well over \$900,000 of the money involved in that project came from Investors Diversified Services, Inc., and Investors Syndicate of America, Inc. Both are members of the Minneapolis investment trust group that Alleghany bought into two years ago (BW-May'49, p87). Wall Streeters ask why this group couldn't participate again in buying the Central shares.

• **More Problems**—There's another fly in Young's ointment. Even if he shifted from Chessie and won a place on the Central directorate, it would still be far from certain that he would have enough control to insure the Central's being included in the transcontinental system.

Once upon a time, pro-Youngers boasted that if their hero were allowed to be associated with the Central he would probably be able to swing as many as 1-million of its 6.6-million shares. But anti-Youngers point out that this boast was made when Young was riding high. What's more, they say, Young would find that the Central board already has ironbound ideas of its own on how the line should be run.

Add it all up and you can see that even a tough maverick like Young—and even with many good breaks—isn't going to find it a picnic to piece out a transcontinental system. Indeed, Young's backers have probably been keeping their fingers crossed since he decided on Western Pacific as his far-western link. They remember some ancient history:

Western Pacific is a far different proposition today from when it was built. But nearly 50 years ago George Gould, son of old Jay, went broke when he picked it as the western link in his transcontinental scheme. When Gould's bubble broke, he needed only to bridge the small gap from Wheeling, W. Va., to Pittsburgh in order to control trackage all the way from San Francisco to Baltimore.



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A plastic chip from a soft-tipped hammer with which he was working struck a mechanic in the eye. As a result, vision in the injured eye was completely destroyed.

Charging that the accident was due to a defect in the hammer the mechanic made damage claims against three different concerns—the supplier who sold him the tool, the hammer manufacturer and a specialty manufacturer who had made the plastic tip used in the hammer assembly. One of these firms, a Hartford Liability Insurance policyholder, was presented with a demand for several thousand dollars, but the claim was withdrawn when investigation and legal defense—provided by the Hartford—proved it could not be sustained.

* * *

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Selling Curb Exchange to Business

No. 1 problem for new president is listings—getting new ones, keeping old ones. Curb has had heavy losses since war.

On Apr. 1, Edward T. McCormick leaves his job as a member of the Securities & Exchange Commission to become president of the New York Curb Exchange. His major problem will be to get new stock listings for the Curb and to keep companies whose shares are listed now from shifting over to the Big Board.

• **Sign of Time**—In a way, McCormick and his problem are indicative of the change that's taken place in the last 15 years. The Curb no longer locks horns with government regulatory bodies, as it once did; in fact, its new boss comes from one of them.

Where the problem lies now is with business. McCormick faces a real headache in having to sell the exchange to U.S. industry. To keep strong, the Curb has to have constant replacements for the companies who move their issues over to the stock exchange. This usually happens after an issue has proved its worth in the smaller marketplace.

The Curb has suffered some heavy losses in the last few years—about 75 listings since 1945. Not enough new ones have come in to replace them. Just recently, Cities Service Co., which had been listed since the days when the Curb was actually doing business on

the curbstones of Broad St., shifted over to the Big Board. And mighty Aluminum Co. of America, usually a leader in curb trading, has applied for listing in the rival shop.

• **What May Help**—A couple of things may work in McCormick's favor. One is the long-standing Frear Bill (BW—Feb. 25 '50, p105). If passed, it would require some 1,800 corporations, now exempt, to register with SEC. At present, only securities listed on a national exchange, or which were floated publicly after 1936, have to be registered. If the Frear Bill became law, U.S. stock exchanges would probably get quite a few new applicants.

The Frear Bill, which got to subcommittee hearings of the Senate last session and proved a hot subject, has not yet been reintroduced. But it's by no means a dead issue. Sen. J. Allen Frear, Jr. (D., Del.) plans to bring up a new bill as soon as he can put together a version that incorporates changes suggested by the SEC, by the subcommittee, and by individuals who testified at the last session's hearings.

• **Big Board's Choosiness**—The other factor that may help McCormick is that the Big Board is getting a bit choicer about the stocks it lists. Last year it

decided that a company must have 300,000 common shares to be eligible, instead of 200,000. As before, this stock has to be distributed among at least 1,500 stockholders. And the stock exchange now requires an applicant to have earning power of \$1-million a year, instead of \$750,000.

• SEC Career Man—McCormick takes over the president's post from Francis Adams Truslow, who has a special assignment from the State Dept. on Latin American affairs. Now 40, McCormick has made SEC his career. After about 15 years with it, he was made a commissioner late in 1949, when chairman Edmond M. Hanrahan returned to private law practice. The shift boosts his annual salary from \$15,000 to \$40,000.

FINANCE BRIEFS

98% of par: That's the value the New York State Insurance Dept. put on the Treasury's new 2½% long-term bond. The tag is used in figuring deposits that certain types of insurance companies have to make with the department.

The corporate new issues market is still showing the effects of the recent break in governments (BW-Mar. 24'51, p120). New Commonwealth Edison bonds recently offered at 101.33% of par are now 95½% bid over the counter; Southern California Edisons offered at 101.34 are 98 bid; New England Powers offered at 102.13 are 98 bid. Large amounts of the new issues remain undistributed.

Salaries were boosted 10% across the board by National City Bank, New York, to meet rising living costs. Another possible motive: to cut down employee turnover, which has been high in banks since mobilization.

Detroit Edison earnings will drop about 6% in 1951, Chairman Prentiss M. Brown told stockholders. He looks for a business decline in the Detroit area, plus higher operating costs.

Mother Bell expects that stockholders will subscribe nearly 100% of its latest offering of \$415-million convertible debentures (BW-Jan. 27'51, p108). Subscriptions have run well above previous offerings.

New industry wanted: Adena, a mining town of about 2,000 people in eastern Ohio's coal fields, will supply free land and buy \$50,000 worth of stock in any company that will build a plant there.

Precision by the ton

An automobile hood is not only a fairly large stamping, but because it is seriously unbalanced in shape from front to back, dies have a tendency to rock as pressure is applied.

The big 4-point, 1500-ton capacity Clearing in this picture, at the Kaiser-Frazer Willow Run plant, is turning out this job in ideal fashion. The multiple suspension, plus the Clearing crankless principle and generous gibbing, keeps the dies true despite severe load unbalance. That means long die life and few production interruptions. If you're interested in the details, we'll be glad to supply them.

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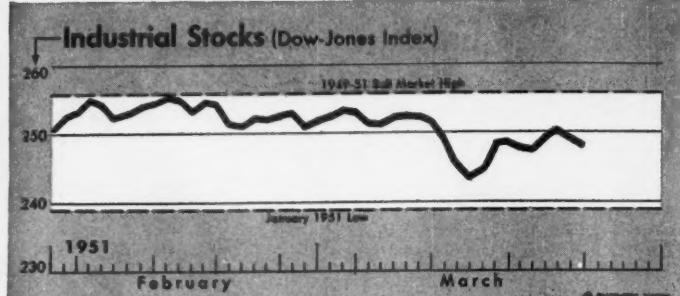
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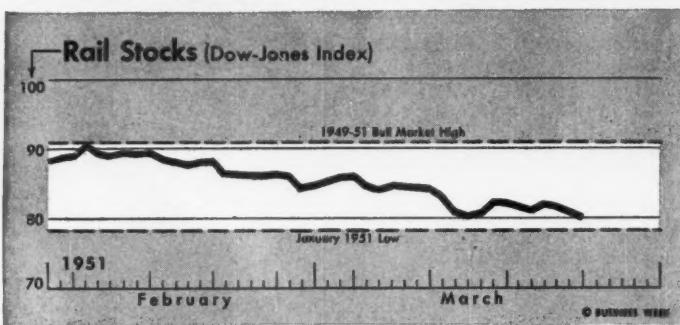
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THE MARKETS



INDUSTRIALS have lost half their early 1951 gains, while...



RAILS are close to their 1951 low

Market Waits for a Sign

Nobody's dumping stocks; they're just not buying till they see which way the economy goes. Many traders fear a slackening in business. But full weight of defense contracts is still to come.

Uncertainties like these:

- Persistent rumors of peace.
- Signs that some inventories are growing faster than sales.
- New credit policies.

These—and their effect on security prices—are the chief topics that investors and traders have been mulling over in recent weeks. But judging by the way the stock and bond markets have performed lately, they haven't come to any satisfactory conclusions.

Almost every upswing in security prices has been followed by a sell-off—usually a steep one. And more and more of the gains scored earlier this year have been wiped out in the process (charts, above). Just on Monday of this week, 78 stocks on the Big Board hit new lows for the year; 65 more of them broke bottom the next day.

• **Other Markets Affected**—You find the same indecision in other markets.

Commodity buyers show little inclination to take on new commitments. Most of them are using an "escape hatch"—cashing in on paper profits—and retiring to the sidelines for a better look at the uncertainties.

The corporate new issues market is bogging down, too. Underwriters have about \$65-million in unsold remnants cluttering up their shelves. Though not really abnormal, that's still a big "float." It's sure that many underwriters will have to absorb fairly sharp losses to dispose of their holdings (page 93).

• **No Panic**—Overall, though, the stock market picture isn't entirely black. There are no signs yet of panicky liquidations. Trading volume is way down from what it was a few weeks ago when prices of most shares were leaping from one high to another. While price levels are definitely going down, it's a drift

down, not a nosedive. This points primarily to an absence of buy-orders rather than stock dumping.

It's anybody's guess how much longer this indecisive trading will continue. It might clear up when first-quarter earnings reports come out; they're going to look good compared to those a year ago. New tax legislation may make the bulls snort, too. It looks now as if the new bill won't be so rough on either individuals or corporations as was anticipated.

• **Gloomy Outlook**—But most traders and investors are less optimistic. Many think that the post-Korean boom is losing some of its steam. They hear reports of inventories piling up, of a disappointing Easter trade, and even of some price cutting to get stalled goods moving again. They are beginning to wonder whether U.S. productive capacity has grown so big in the postwar years that it can now supply both civilian and military demands and still have a little left over.

• **Shortages to Come?**—As long as that thinking persists, you aren't going to see any return in the stock market of the avid inflation-fear buying that sent securities skying earlier this year.

It could be, though, that what looks like a minor slackening in business is really just the lull before the storm. The full weight of defense contracts is just beginning to bear on. The shortages that were expected earlier may be soon to come.

Wellington Trust Is Selling Commons

Individual traders and investors aren't the only ones who have lately become cautious in their appraisal of the near-term stock market outlook. Professional investors have also been taking steps to protect themselves against whatever may be ahead.

Take the Wellington Fund. That \$167-million open-end "balanced fund" investment trust recently announced it had been readjusting its portfolio. As a result, it held less common stocks, "appreciation" bonds and preferreds, and senior issues convertible into commons; it held more "investment" bonds and preferreds, Treasuries, and cash on Mar. 1 than was the case at the 1950 year-end.

Wellington sold such commons as Chesapeake & Ohio, Great Northern, American Smelting, American Steel Foundries, Phelps Dodge, Pullman, St. Joseph Lead, Marathon Corp., National Steel, Air Reduction, Stokely-Van Camp, Aluminum Co., Allis Chalmers, Bethlehem Steel, Gulf Oil, International Nickel, Koppers Co., and Standard of California.

Southwest Success Story



Today's high-speed civilization plus the reorganization of the Army and Navy for war has put ever-increasing demands on the petroleum processing industry. The oil companies of America have continued to build and expand facilities for producing more and more petroleum products. Today more petroleum is produced and processed in the great Southwest than in any other area in the world.

Brown & Root, a pioneer constructor in the Southwest, is justifiably proud of its contribution to the petroleum industry and other industries in this part of the country. Brown & Root offers experienced counsel backed by more than thirty years of successful engineering and construction in the Southwest. A complete knowledge of soil, terrain, people, and climatic conditions will result in faster, more economical completion of any contemplated project. A request from you will put Brown & Root consultants at your service.



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CMP TECHNICIANS: W. Walter Watts will head a bottleneck-breaking crew; C. E. Wampler's requirements committee will divide materials. They want to make this . . .

Decision Week for CMP

If the Controlled Materials Plan is to start July 1, it'll have to get the go-ahead in a few days. But Administration wonders whether the country is ready for that much regulation.

Washington's mobilizers have their shiny 1951-model Controlled Materials Plan all gassed up and ready to go. But as of midweek, nobody wanted to turn the ignition key.

• **Wilson's Choice**—Starting CMP is squarely up to boss mobilizer Charles E. Wilson. And Wilson is frankly undecided as to whether he will get CMP going soon—or at all.

His decision is expected soon, however. It will have to come within a few days if CMP is to go into effect by July 1, as some of his aides have planned. It will take that long for the controllers to get their regulations ready and to notify industry.

• **Proof of Need**—Wilson has made it clear that he wants to be sure of the need for CMP first. He insists that the CMP adherents among his staff of mobilizers prove beyond question that such complete controls are necessary to meet mobilization requirements. And he hints that CMP, primarily a program to guarantee military and supporting production, would have to be trimmed to promise minimum restriction of the civilian economy.

Wilson and his top aides are well aware that existing piecemeal controls are inadequate. The armed services already complain that DO priorities are not enough to get them the materials

they need when they want them. And the peak demand of defense projects for materials is yet to come—probably about a year away.

• **Slow on Pickup**—That's why many Wilson aides want CMP by July 1. They point out that it would take about nine months for the plan to become really effective. For one thing, they won't know for sure just how much copper, steel, and aluminum—the CMP metals—are used by industry until they get the first reports on metal use under the plan's reporting system. And they won't be able to do much about heavy equipment, like power turbines and generators, that has been ordered in advance and requires months to complete. You'd waste more metal than you'd save by stopping production on such items.

If CMP got started in the third quarter of 1951, the mobilizers would have most of the kinks ironed out by spring of next year, they believe. That would be just in time to meet the heaviest materials demands of the military and expansion of basic industrial capacity.

• **Will They Stand for It?**—The toughest thing the controllers now have to decide is how much industrial control the country will stand for. CMP, in any of the several forms considered,

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would require a large government bureaucracy to administer it. It would require an onerous burden for industry of filling out reports. And it would impose far-reaching controls on a large segment of the economy.

In the face of continuing good news from Korea, of no new threats from the Communist front, the job of the controllers is becoming more and more difficult. Controls agencies spend as much time listening to complaints about existing regulations as they do in preparing new orders. Now Congress has started a full-dress investigation of the entire mobilization program.

• **False Start**—The mobilizers never proposed to revive the World War II CMP, with its all-out regulation of all hard-goods production. They planned first to control just the metal required to meet military and directly supporting production. The remaining metal would have been left free for civilian producers. To prevent a wild scramble for free materials, they expected to stiffen existing orders limiting the use of scarce materials in certain nonessential, or less essential, civilian products.

By controlling production of copper, steel, and aluminum, they felt they could take the military demand out of total available supply, then portion the rest among civilian industries. At the same time, the materials cutbacks would be revised to trim civilian demand to the quantities available after the military cut.

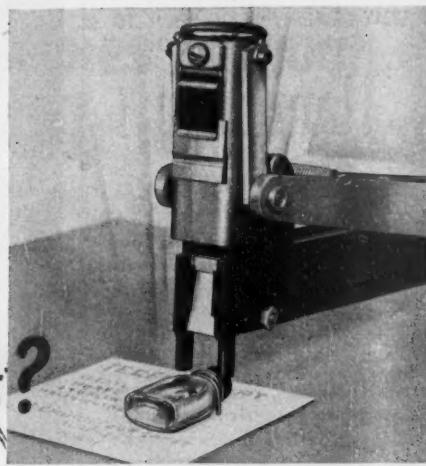
That sounded fine until the word got out that electric utilities, oil producers, freight car makers, and dozens of other "essential" industries were scheduled for CMP allocations of materials. Suddenly every industry, from hairpin manufacturers up, started claiming essentiality and the right to allocations.

• **Revised**—So the controllers revised their CMP blueprint to cover a broad range of civilian hard goods. They decided to schedule and allocate materials for components of all types—not just those required for defense production but all of them.

This would guarantee some level of production for many civilian producers. The controllers are still working out means of assisting the others under CMP.

• **Alternative**—The only alternative to CMP would appear to be some new system of priorities and partial rationing, such as we experimented with in the early days of World War II. But mobilizers estimate that we lost nearly a quarter of our possible production then because of the confusion that was involved. And they believe we cannot risk such a hit-or-miss system despite the comparatively mild buildup that we now face. That's why they've passed the buck to Wilson.

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THREE-DAY MEETING with government experts was staged by American University.

Business Asks About War Contracts

At sessions in Washington it peppers procurement officials with queries on government work. Here are answers it got.

Some 300 businessmen from all parts of the country paid \$25 to Washington's American University last week in an effort to find why they couldn't get government defense contracts.

The university, in cooperation with the National Assn. of Manufacturers and the Munitions Board, ran a three-day institute for the executives on services procurement. American University's president, Paul F. Douglas, started the idea, and Emil K. Gubin, Washington administrative lawyer, masterminded the program. Gubin, singlehanded, cajoled 40 government purchasing officers and eight businessmen to sit on the panels.

• **What They Asked**—In the main, business' questions and gripes about procurement fell into five groups: (1) Can't we get better information on items bought by the government and where they are bought? (2) How can a small businessman get a prime contract? (3) Where does a businessman get information on prime contracts so he can go after subs? (4) How does he get by under controls that take away raw materials unless he has a military contract? (5) How is negotiation carried on?

These were the answers the panels gave them:

• On information, the three services pointed to their How-to-Sell book-

lets, which give general information on what the military agencies buy and list addresses of local procurement offices. The three booklets have been rewritten recently, and the Navy's new edition came out last week.

• For small business after prime contracts, the government held little hope. The services are not encouraging the breaking up of large contracts to bring in the smaller people. The large, proved contractors do a better job and, in the end, save the government money, they say. But procurement men would like to see more subcontracts passed out by the prime contractors.

One of business' biggest squawks was about the "middleman" contractor—who owns neither plant nor equipment, and who has no employees. This type of contractor has been getting a lot of government business, which he subcontracts and takes a cut from.

The experts say this is legal. Under the spreading-the-base theory, financial responsibility is the criterion for awarding contracts. But they advised the "middleman's" subcontractors to short-circuit him in the future and go after the government contracts directly.

• Procurement officers admitted there is no central place where a subcontractor can find what contracts have been let and to whom. Commerce Dept.'s weekly synopsis of contract

awards (which must be picked up in person at Commerce field offices) is the only source listing such information. But this is inadequate since it does not include many contracts.

• Panel members saw dim prospects for nondefense manufacturing. All they could recommend was that a company appeal to National Production Authority for a hardship ruling, if it found it couldn't get by without some priority for raw materials.

• Businessmen complained that contract negotiation regulations are vague and ambiguous. To some it was unexplored territory. The experts assured them that the lack of ground rules for negotiation does not mean there is anything under cover about the buying. Competition still exists because a number of possible suppliers are always approached to submit the original bids. From these bids the government selects several companies to negotiate with.

• **Bible**—The bible for negotiation is the Armed Services Procurement Regulations (ASPR), now undergoing revision. But ASPR only outlines the circumstances permitting negotiation, discusses policies in general terms, and in part, defines some costs that may be allowed. Actual rules have yet to be written.

The majority of military contracts are now negotiated. Advertised bids are not out the window, but have been cut by at least 50%.

DEFENSE BUSINESS BRIEFS

Lead may be headed for a conservation order. Supply may fall 16% below the 1½-million tons needed this year, NPA told storage battery makers.

Benzene supply will run 17-million gal. less than demand this year, NPA heard from the industry advisory committee. U.S. output will be 235-million gal. The committee suggested a deal with Western Germany for benzol, which could be converted into benzene.

Industrial storage battery makers asked NPA's help in getting raw materials to meet the needs of submarines, mines, locomotives, industrial trucks, powerplants, and other users. NPA told the manufacturers to make a study of what their product is used for, so its essentiality can be determined.

A shortage of ballasts, which act as small "transformers" in fluorescent lamps, can be solved—given more silicon steel, copper, aluminum foil, and oil-filled condensers, the industry says. These materials are also needed for capacitors and resistors. NPA sug-

"200 copies by noon, he says! It would take 5 people to do that!"



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MACY'S USES G-E RECTIFIERS



Above: These ignitron tanks are the heart of the rectifier. The main transformer is at the left, with the bus-bar enclosure between.

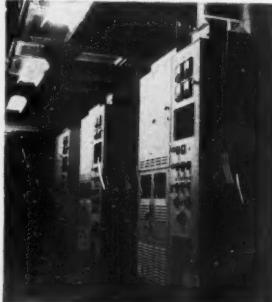
* * *

Right: Control and protection of the store's 5000-kw d-c power-distribution system is centered in metal-enclosed control cubicles each of which contains a separate d-c breaker compartment.

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GENERAL ELECTRIC

When this famous New York department store decided to buy power instead of generating its own, it was faced with replacing d-c distribution system, motors, and control with a-c apparatus, or converting purchased a-c to d-c. Macy's decided to convert power for certain apparatus to d-c, using dependable proved-in-service G-E mercury-arc rectifiers. For any a-c to d-c conversion problem, you will find a long record of outstanding results behind G-E mercury-arc rectifiers. Ask your G-E representative for details. General Electric Co., Schenectady 5, N. Y.



gested classifying silicon steels into three types and establishing alloy percentages according to end use.

NPA said no to the truck-body manufacturers' plea for more high-strength, low-alloy steel. Use plywood instead, said NPA. The manufacturers reported they're getting only 40% of the steel they got pre-Korea.

Cadillac's first tank was produced at Cleveland. Line production is still months off. The model, a Walker Bulldog, is a 25.8-ton modification of the T-41 medium tank.

All-rail ore shipments from Lake Superior ranges to the mills are being scheduled at 5-million tons for this summer. Steel's winter rail experiment failed to meet its goal—mainly because of railroad strike and severe weather (BW-Mar.10'51,p24).

Tentative military orders will grab up the entire expected output (7,000 units) of power cranes and shovels this year, the industry warned NPA. It still has its World War II capacity of 10,000 units a year. But it says it can't reach that figure in 1951 without help.

The dye industry asked NPA to remove the chemicals it uses from the general MRO regulation. A flood of MRO orders is drying up the supply of hydro-sulphides, peroxide, perborate, and agents for wetting, dispersing, bleaching, finishing, and processing.

Department stores may spend up to 25¢ per sq. ft. of their occupied space for store-space improvements in a 12-month period without an NPA O.K. Until construction order M-4 was amended, only hotels and office buildings could do this.

A new round of standardization, simplification, and substitution studies is in the works at NPA. In one week, industry committees representing makers of truck bodies, power cranes and shovels, refrigerators, freezers, and electronic components were instructed to hunt ways of saving scarce materials.

Aluminum allotments for defense production were upped by NPA. It ordered producers and fabricators to increase their defense set-aside by 15 percentage points, effective Apr. 1. Distributors and jobbers have to raise theirs 20 percentage points.

The Pictures—Cover by Dick Wolters, Int. News—104, 109; Wide World—20, 24, 94; Dick Wolters—22, 23, 78.

CHECKLIST Of Defense Regulation

With this issue, BUSINESS WEEK starts publishing weekly a listing, and condensed description, of all the material and price-control regulations issued by the defense agencies during the preceding week. Fuller accounts of the more important orders will often be found elsewhere in the magazine.

Full texts of the material orders may be obtained from National Production Authority, Washington 25, or from any Dept. of Commerce regional office.

Full texts of the price orders may be had from the Office of Price Stabilization, Washington 25, or from the regional OPS office in your area.

Material Orders

Department stores: Allowed to alter store space up to 25¢ per sq. ft. of occupied space in a 12-month period. Amendment to M-4 (Mar. 20).

Terminal warehouses: Construction permitted without authorization if an integral part of a common carrier system. Amendment to M-4 (Mar. 20).

Paper: Private printing firms holding contracts from the Government Printing Office permitted, in certain cases, to use paper from stocks reserved for government; percentage of certain grades of paper to be held for DO orders increased. Amendment to M-36 (Mar. 21).

Rigid electrical conduits: Manufacturers ordered to accept DO orders up to 25% of monthly output. Amendment to M-17 (Mar. 23).

Aluminum: Set-aside to meet DO orders increased 15 percentage points in each category for producers and fabricators, 20 percentage points for distributors and jobbers. Amendment to M-5 (Mar. 26).

Price Orders

Agricultural commodities: Price control exemption to be removed when producer price reaches parity or its legal equivalent—base period to be the most recent five-week period before removal of exemption. Effective Mar. 2. General Ceiling Price Regulation, Amendment 7 (Mar. 19).

Contracts for future delivery: Commodity or service offered for future delivery at the fixed or ceiling price in effect at time of delivery—whichever is lower. GCPR, Amendment 6 (Mar. 19).

Used car prices: Authorization of use of republished volumes and additional guidebooks for pricing used car sales. GCPR, Supplemental Reg. 5, Amendment 2 (Mar. 19).

Pricing charts: Deadline for filing by retailers covered by GCPR 7 extended

CANDID CAMERAS TO "CANNED" ENGINES

Top
CAMERAS are the product of this world-famous manufacturer. Here a 1-ton capacity Lorain Moto-Crane handles 16-ton tanks—but one of many material handling and plant maintenance duties for their fleet of 6 Loraines.

Right
ENGINES for the fighting "Wasp" roll off assembly line in larger quantities than Consolidated Vultee Aircraft Co., San Diego, California, canned for shipment. Loading trucks is another man-saving job for their 15-ton Lorain Moto-Crane.

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to Apr. 30. GCP 7, Amendment 1 (Mar. 19).

Retail items: May 30 is new deadline, after which a retailer cannot sell any item covered by Reg. 7 without acknowledgment of receipt of charts by OPS. GCP 7, Supplement to Reg. 1, Amendment 1 (Mar. 19).

Bituminous briquettes: Those produced at plants in or near coal fields removed from GCP 7, and placed under the coal regulation, effective Mar. 24. GCP 3, Sup. to Reg. 1 (Mar. 20).

Sales by CCC: Ceiling prices for sales by Commodity Credit Corp. may be the higher of (1) the ceiling price applicable to sales of the commodity to the class of purchaser involved, or (2) the minimum sales price authorized by Section 407 of the Agricultural Act of 1949. GCP 7, Supplement to Reg. 14 (Mar. 20).

Petroleum products: Ceiling price fixed at highest price charged for each grade of products during base period Dec. 19, 1950, to Jan. 25, 1951. Also, retailers who made no sales during base period should adopt same price as other retailers within radius of one mile. Retailers must post complete ceiling price schedules covered by the order. GCP 7, Mar. 22).

Bleachable prime yellow cottonseed oil: Permits pricing at ceiling price for crude cottonseed oil, plus a 2¢ refining charge and freight charges from point of origin to refinery. GCP 6, Amendment 3 (Mar. 23).

Floral products: Exempted from GCP 7, effective Mar. 27. Order covers cut greens, natural flowers, nursery stock. GCP 7, Amendment 8 (Mar. 26).

New Electronics Agency Will Step Up Deliveries

Electronics—the runaway baby of the mobilization effort—is going to have its own control board.

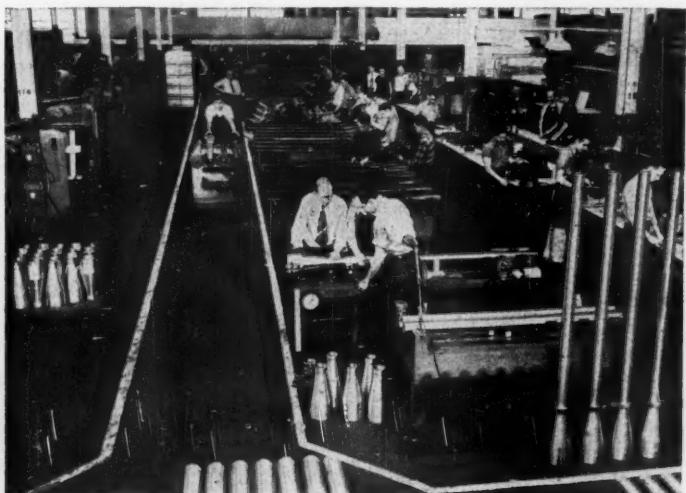
Defense Production Administration chief William H. Harrison made the decision in answer to the military's gripes that deliveries were lagging. At the same time, some segments of the industry reported that, unless something were done about raw materials, they would have to shut down.

The new board will determine the raw materials needs of the industry and will recommend allocation of finished products. It will recommend policies for expanding output, conserving materials and standardizing products.

• **Widespread**—The demand for electronics has surprised even the experts who had warned that modern warfare would be fought with vacuum tubes. The armed services can't operate a ship, tank, plane, heavy gun, atomic device, or guided missile without electronic parts.

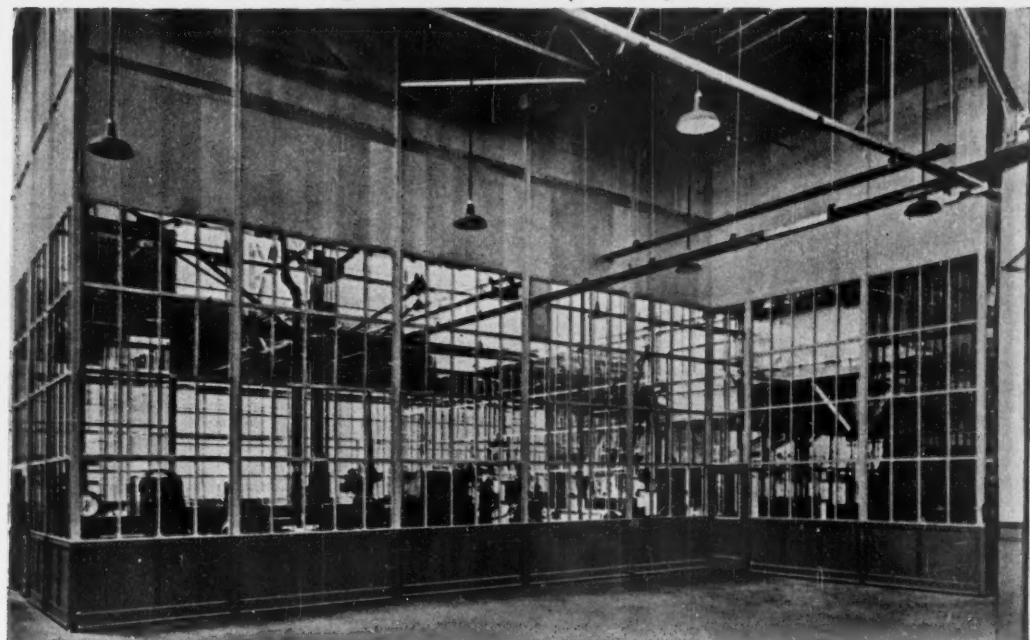
The relatively limited use of electronics in World War II set no pattern for expansion. Now it has created new and complicated problems.

• **Top Men Will Take Over**—Harrison will appoint a chairman to run the new board. Also serving will be the chairman of the Atomic Energy Commission, the director of National Production Authority's Electronics Division, representatives of DPA, the Dept. of Defense, the Munitions Board.



ARMS FOR THE ARMED FORCES are rolling off production lines all over the country. Firestone Tire & Rubber Co. at Akron, Ohio, has stepped up its production of recoilless rifles, and the program is going full blast.

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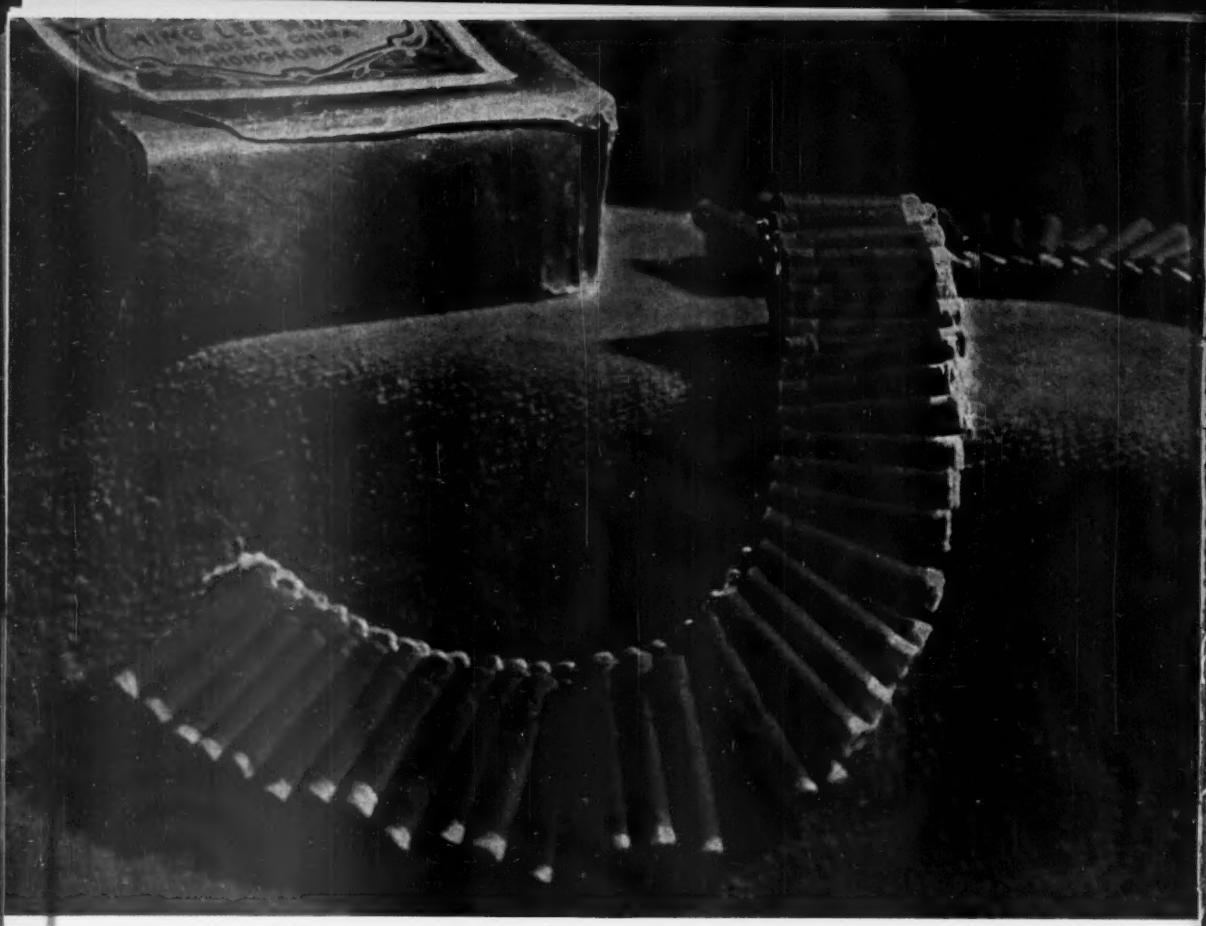
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*Source: Publishers' Information Bureau Analysis

A McGRAW-HILL PUBLICATION

INTERNATIONAL OUTLOOK

BUSINESS WEEK

MARCH 31, 1951



There's more than meets the eye in the Washington-MacArthur feud.

At bottom, the issue is this: Should the U. S. try for a military solution in Korea or for a negotiated settlement?

MacArthur wants to try the purely military route. His truce offer to the Chinese Communists said, in effect: You're licked, and you might as well accept it; we won't hand Formosa over to you, and we won't let you into the U. N. What's more, if you don't take our terms, we can destroy your military potential at home.

By contrast, the Administration is ready to try for a general settlement if the Chinese stop fighting in Korea. Just before MacArthur's offer, the State Dept. had been talking over a new cease-fire proposal with the other U. N. nations that have forces in Korea. Discussion of Formosa and the U. N. question was part of the package.

As for extending the war to the Chinese mainland, Truman has promised both Britain and France that the U. S. will keep the Korean war localized. Without that promise, the Western front against Peiping might have collapsed before this.

There are two theories on the purpose and timing of MacArthur's move.

Reports from Tokyo say that MacArthur got word that Chinese generals in Korea wanted to talk things over with him. So he decided to stake out his ground before any dickering started.

In U. N. circles, the story is this: The pro-Chiang Kai-shek group in Congress got wind of the new U. N. cease-fire plan. So they tipped MacArthur off, hoping he could stymie any discussion of Formosa and Chinese membership in the U. N.

Some of our allies are so mad at MacArthur that they're urging Washington to relieve him as U. N. commander.

But that's probably not in the cards right away. For political reasons, it would be simpler for Truman to wait for a Japanese peace treaty. That would automatically end MacArthur's role as supreme commander in the Far East.

From every political angle the Korean situation looks muddy.

The British, for example, have been hoping right along for a cease-fire once the Chinese had been pushed back to the 38th parallel.

But London isn't so sure now. The Foreign Office has information that Red Chinese leader Mao paid a secret visit to Moscow recently, got Stalin's promise that Russia would equip some Chinese divisions. (The Chinese have had far less Russian equipment than the North Koreans had.)

French military men expect a Communist offensive in Indo-China soon.

The French figure this is the time for Ho Chi-Minh to attack. He has 100,000 fresh troops, just trained and equipped in Red China.

What's more, the weather will be on Ho's side. For two months, overcast skies will limit French air action. Then the rainy season starts, and that will hamper any large-scale land operations by the French.

Paris and London still think a Big Four agenda can be worked out.

French Foreign Minister Schuman, who is in Washington with President Auriol, will press Acheson to compromise with the Russians on the agenda. Now that the French government faces early elections, it's more anxious than

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

MARCH 31, 1951

ever to have the Big Four talks held (otherwise French voters might blame it for failing to ease the tension).

Acheson won't need much persuading. The State Dept. feels the foreign ministers must get together if the Russians aren't too unreasonable. But State doesn't want the agenda rigged as a propaganda platform for Moscow.

If the Big Four meets, Acheson will have a job keeping a united front with Britain and France.

Regardless of how the agenda is worded, the Russians will stress German rearmament, and that's bound to create U. S.-French differences.

French leaders are almost as scared of the Germans today as of the Russians. They would welcome almost any settlement that would keep Germany unarmed.

U. S. business has a stake in the current meeting of the Organization of American States (BW-Jan.27'51,p125).

Washington is asking the Latin American governments to set up mobilization programs of their own— inflation curbs, raw material controls, higher production goals.

Moreover, the U. S. wants each Latin American state to earmark troops for future wars or police action under the U. N. Washington promises some equipment and training, but hopes the states will make themselves largely self-sufficient.

The Latin Americans, for their part, want development aid plus a guarantee of essential consumer goods from the U. S.

They feel that Europe got the lion's share of postwar U. S. aid. So they will be asking for over \$100-million in U. S. grants—for projects to raise living standards.

More important, they want to be sure they can lay their hands on essential goods in the U. S. Every delegation has memories of World War II, when Latin America had plenty of money but couldn't find goods to buy.

It will take weeks of talking for the OAS to reach formal agreements that satisfy everybody.

Foreign countries added \$3.6-billion to their gold and dollar reserves in 1950—\$2.5-billion after Korea. In fact, reserves abroad are now back to about the 1945 level.

But rearmament is bound to reverse the trend in Western Europe. It will cut into Europe's dollar exports and boost the need for dollar imports.

ECA is already urging Western Europe to import more, even from the dollar area, to head off shortages and check inflation.

France is the country where inflation threatens most. Wage boosts just granted by the government seem sure to set off a wage-price spiral. Once that happens, rearmament will become very unpopular in France.

British rearmament is being slowed by a shortage of machine tools.

British industrialists say getting delivery on orders placed in the U. S. is the heart of the problem. So a mission is coming over to plead for priorities.

The British defense program calls for £60-million worth of machine tools during the fiscal year starting Apr. 1. But Britain's own industry produces only £40-million and lacks the skilled labor for rapid expansion. Moreover, big commitments had been made for nonmilitary uses at home and abroad.

BUSINESS ABROAD



PRIME MINISTER Attlee, low on political strength, faces a new crisis as . . .

Raw Materials Stymie Britain

A shortage of sulphur, zinc, cotton, iron ore, and nickel slows industry just as it needs more production for defense. The strain on the economy may bring down the Labor government this year.

LONDON—It was Britain's acute shortage of dollars in 1949 that undermined Labor's strength and nearly brought down the Attlee government in the elections of February, 1950. Dollars are no problem today. The shortage that now threatens the British economy is in raw materials. This raw materials shortage could easily finish off Labor before 1951 is out.

• **Dashed Hope**—This crisis doesn't threaten to be quite so serious as 1949's. But it's slowing down British industry at a bad time, just when expanding production is needed to speed up rearmament without taking too big a bite from exports and home consumption. When ECA aid was cut off last December, there were hopes that a rising trend in industrial production would yield at least £400-million a year more in resources for arms, exports, and consumption. The raw materials shortage has dashed that hope. Rearmament is now being imposed not merely on a fully stretched economy but on total resources that are almost certain to decline rather than increase.

Prime Minister Attlee—who is now in a London hospital for ulcer treatment—has to meet this problem when his political strength is weaker than at any time since 1945.

• **Worst to Come**—The full impact of the materials shortage hasn't been felt yet; there's still a trickle from industrial pipelines. Even so, some cotton, rayon, and jute mills are partly closed down or working short time. The same is true of brass foundries, automobile plants, bicycle works. Many other factories are producing falteringly at the present time because their deliveries of raw materials, components, and packaging are irregular.

Only a few thousand workers have actually been laid off. But many thousands who are kept on factory payrolls are idle part of the time. Employers don't dare lay off workers for fear they won't get them back.

• **Trouble Spots**—The real trouble will come as soon as defense orders expand. The pinch will be felt most in sulphur, sulphuric acid, zinc, and raw cotton. But shortages could become critical, too, in

(Advertisement)
Elgin American Visits
British Industries Fair



ALLEN B. GELLMAN

"In 1950 I purposely scheduled my European trip to coincide with the British Industries Fair," says Allen B. Gellman, President of Elgin American, famous manufacturers of fashion accessories. "The Fair unquestionably has aspects of special importance to visitors in almost every field of industrial enterprise. To me, the Fair revealed much of special interest and was so well worth a visit that I hope to attend again in 1951."

British Industries Fair—London and Birmingham, April 30-May 11. For details phone or write nearest British Consulate, or British Embassy, Washington, D. C.

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iron ore, steel scrap, nickel, cobalt, paper-making materials, all packaging materials from wrappings to steel drums, plastic powders, and metallic paint pigments.

Britain might scrape through these shortages with the help of bigger shipments of sulphur and cotton from the U.S. and some more austerity. It squeaked through a coal crisis this winter by rationing industry, cutting household supplies of coal, and suspending hundreds of passenger trains, but it is going to be a painful process at best.

- **Estimates**—The raw materials shortage is due more to expanded demand than reduced supply. Total manufacturing production is now 8% above a year ago and 40% over 1946. Chancellor Gaitskell thinks industrial production can be held at the present level throughout this year.

However, the Federation of British Industries (Britain's NAM) thinks the country will lose the 8% gain made last year. That's the gap between the optimist and the pessimist as they try to calculate the combined impact of shortages and diversion to defense.

Prime Minister Attlee warned Parliament in January that limitations on production might make it impossible to reach his defense target of £4.7-billion over three years. Attlee's assumption still is that Britain can't afford to reduce its exports and can't screw austerity too tight without damaging the will to work. Whether exports could be cut safely depends on the amount of U.S. aid Britain gets.

- **U.S. Aid**—So far, U.S. military aid hasn't entered into British discussions of their economic plight. But in the background there are hopes of \$2-billion to \$4-billion over a three-year period. If aid should amount to as much as \$3-billion, Britain could probably afford to cut its exports without running into a serious payments problem.

The fact is exports may drop anyway. A shift will have to be made from hard to soft goods as rearmament cuts increasingly into foreign sales of metal products, machinery, autos, trucks, bicycles, chemicals, radio, radar, electronic equipment. The government tells industry that it must export more textiles and other soft consumer goods. But production of these is already being restricted by shortages of raw cotton, raw wool, and sulphuric acid. Also world markets are more competitive for soft goods than for hard. German and Japanese competition will be particularly discouraging.

- **Gap**—How much Britain must export to keep out of the red depends a lot on its terms of trade. If world prices continue to favor primary products as against manufactured goods, Britain will need to boost total exports by £300-

million in order to pay for the same volume of imports as last year.

Still Britain could get along if exports merely hold their 1950 level. Last year the British had an over-all surplus of £300-million due to high earnings from invisible exports such as banking, shipping, insurance, and oil. And the worldwide boom will push the profit from these sources even higher this year. In any case, Britain could meet a moderate gap from its gold reserves for a year or two without great danger.

- **Politics**—Perhaps the toughest part of the problem for the Labor government to face is the political side—deciding how deeply to cut into domestic consumption. Last year the government gambled on a price drop and let its stocks of food run down.

Now, to avoid food shortages, it will have to pay through the nose, putting added drain on its balance of payments. Coal and electricity are bound to stay tight as arms expansion claims more fuel and power. And textiles will grow scarcer as more are exported.

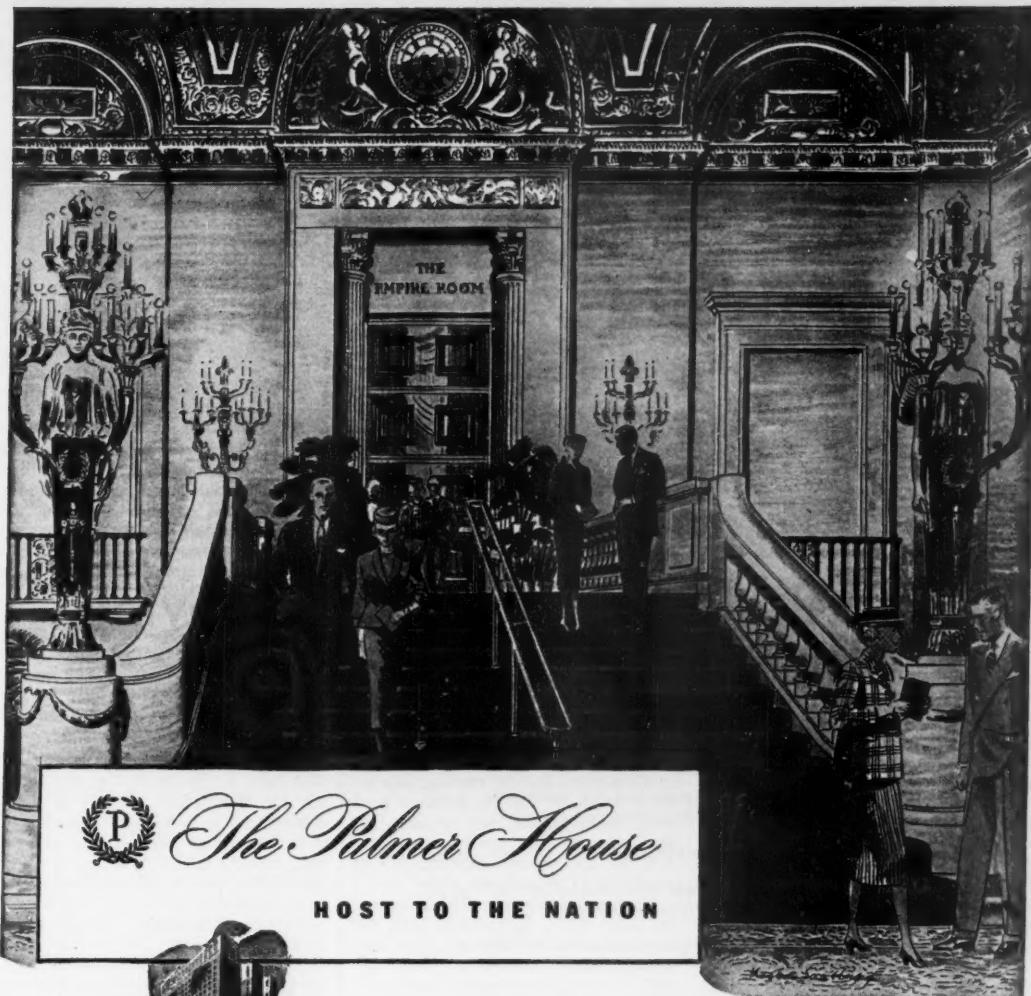
The government hopes that consumption will be checked automatically by prices rising faster than wages. If it can stave off a wage spiral and restrict private capital investment by a system of defense priorities, the government may be able to stem inflation without adding much to the average Briton's tax load.

- **Taxes to Come**—This is expected to be Chancellor Gaitskell's aim when he presents his budget on Apr. 10. Ordinary expenditures are likely to be £4.2-billion. This can probably be covered by present tax rates. The government's net capital expenditures may be about £350-million, but the chances are that Gaitskell will raise £150-million of this by borrowing, ask only £200-million or so in new taxation.

But with taxes already taking 40% of the British national income, even this added load is bound to be painful. Yet it would not necessarily be damaging politically if a good part of it can be imposed on profits and capital gains. That, in fact, might actually be a political asset in a pre-election budget.

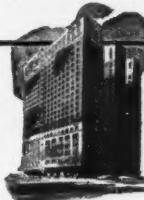
- **Political Forecast**—Elections are in the air once more. Attlee is given only a bare chance of getting through the spring and summer without a defeat in the House of Commons. If elections come, Labor is almost certain to be ousted.

With a conservative government in office, private business would get a boost in morale. There would be a danger, though, of serious strikes if economic policies change too fast. Churchill certainly would put more emphasis on the defense program, and that would sharpen the points of the raw material dilemma.



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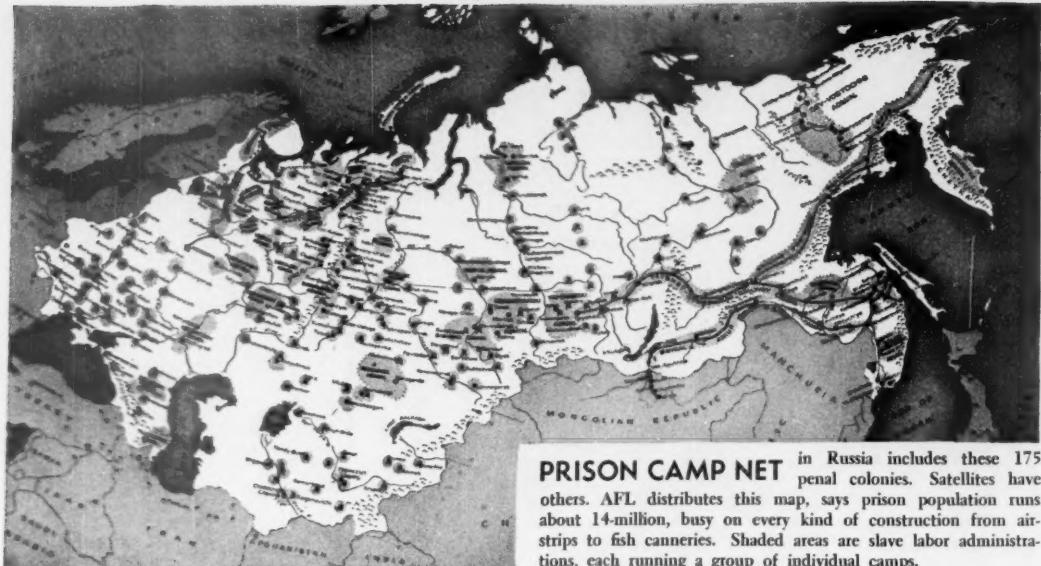
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PRISON CAMP NET in Russia includes these 175 penal colonies. Satellites have others. AFL distributes this map, says prison population runs about 14-million, busy on every kind of construction from air strips to fish canneries. Shaded areas are slave labor administrations, each running a group of individual camps.

U.N. to Probe Slave Labor in Soviet

Soviet Russia's slave labor camps are coming under the guns of an all-out United Nations investigation, probably next summer. And the investigators are loaded for bear, with a massive dossier of eye-witness accounts and even more damning official Soviet documents.

The U.S. and Britain have been struggling for a long time to get the investigation started. Last week they won a clear-cut victory. The U.N. Economic & Social Council, meeting in Santiago, Chile, voted by a 15 to 3 margin to investigate forced labor throughout the world.

• **Squirmings Fail**—Soviet and satellite delegates squirmed desperately to avoid the inquiry into the most unpleasant skeleton in the Communist closet. Caught badly off base by the Anglo-American demand, they talked endlessly about the treatment of African and Asiatic workers by the colonial powers, and the plight of Mexican laborers and Negroes in the U.S.

It got them nowhere. When the chips were down, the only votes against the investigation were cast by Russia, Czechoslovakia, and Poland.

The U.N. investigation will get under way in Geneva, where a five-man committee will sift the existing mountain of evidence on slave labor and try to dig up some more. The committee will get plenty of help from organizations like the AFL, the International Confederation of Free Trade Unions, and the independent Commission of Inquiry Into Forced Labor. These groups have already compiled the

evidence that shocked the ECOSOC delegates in Santiago into action.

• **World Opinion**—The help will be needed; obviously, the Russians aren't going to let the U.N. probers roam around behind the Iron Curtain to see for themselves. But the existing data are plenty to startle Europe, where a good many people already have an idea what life is like in the "worker's paradise." And the commission will have lots of prestige—and propaganda value.

The evidence that the U.S. and the other non-Communist nations will lay on the line at Geneva comes from a multitude of sources; one U.N. official calls it "unquestionably authentic." There are firsthand reports—in the form of sworn affidavits—from thousands of former slave laborers. They tell a story of filth, brutality, starvation, and death. They come from all types of persons—a Polish nurse, a Russian scientist, a Zionist scholar, and Balts, Lithuanians, Germans, Japanese, Moslems.

• **Official Documents**—Even more effective are official Soviet documents, captured during the war or smuggled out later. There's the complete text of the Soviet's "Corrective Labor Code," instruction manuals for camp commanders, and production plans that show how the Soviet economy depends on forced labor. Estimates of slave labor population run all the way from a cautious 3-million or 5-million to as high as 20-million.

Heroine of the show at Santiago was Miss Toni Sender of the ICFTU, who presented a sheaf of Soviet documents

and testimony of former slaves. Prize exhibit was a 75-page manual of instruction for the MVD men (Soviet secret police) who run the Ukhta-Pechora camp in northern Russia.

• **Starvation**—The manual makes clear that food is the be-all and end-all of the forced laborer's life, the only incentive that his MVD straw-bosses hold out. Researchers analyzing the instructions found a deliberate system to make the victims work beyond the limit of human endurance in hopes of getting a meager boost in rations. The normal ration was pegged at 1,292 calories daily; if the worker really extended himself, he got 1,508. Compare that with the accepted standard of 3,000 calories a day for a normal, moderately active man in the U.S. Prisoners being disciplined were down for 716 calories-starvation level.

Walter Kotschnig, deputy U.S. representative at Santiago, backstopped Miss Sender with some revealing economic facts about the Soviet slave system. He presented excerpts from one of the most important Soviet documents now in Western hands. It's the "State Plan for the Development of the National Economy in 1941," which was captured by the Germans during World War II and kept under wraps by the U.S. government until December, 1950. The "State Plan" shows just how much the Soviets depend on forced labor to get things done.

• **Construction**—The MVD Ministry runs the whole forced labor setup. Under the 1941 plan, MVD was

responsible for more than 14% of the total capital construction in the U.S.S.R. What's more, there's evidence that the MVD farmed out some of its "help" to other Soviet ministries, so the 14% figure is undoubtedly low.

MVD construction activities included building the camps themselves, plus mining facilities, logging camps, defense installations, housing, railroads, highways. Other big jobs were in oil production, all kinds of mining, fishing, farming, food-processing, some heavy manufacturing, and production of consumer items like bedding and eating utensils.

Sample statistics taken from the 1941 plan indicate that slave labor was to turn out 12% of all the Soviet timber, 22% of all railroad ties, 40% of chrome ore, 5% of coal—all in all, fully 2% of total production.

• Started by AFL—The slave labor issue has been kicking around the U.N. for several years. Back in 1947, the AFL first broached the question to the U.N.—without much result. For one thing, the Communist-run World Federation of Trade Unions spoke for labor at the U.N. along with AFL and managed to keep the issue out of the limelight. And, of course, most nations at that time didn't want to interfere in the internal affairs of the U.S.S.R.

But in 1949, the WFTU split, and the ICFTU was formed (BW-Mar. '51, p148). The drive for an antislave labor resolution picked up steam. Finally, last year in New York, Britain and the U.S. introduced the resolution that was passed last week.

As yet, Washington hasn't drawn up any plans to use the slave labor issue as the basis for a new propaganda campaign. The inquiry scheduled for June will doubtless draw plenty of attention on its own. But in the meantime, the Voice of America—which has been plugging the slave-labor story in the past—will step up its broadcasts on that theme.

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• Antidote—Ardent Hadacol boosters—there were enough of them to buy \$20-million of it last year (BW-Jan. '51, p72)—figure the medicine is a natural for fighting communism. One told BUSINESS WEEK that, because people

Check-chart for buyers of **MOLDED PLASTIC PARTS**

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- ✓ 4. Are these services performed within his own organization and under his own supervision and control?
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- ✓ 7. Has he the correct size and type of equipment to handle your job most efficiently and economically in the volume you require?
- ✓ 8. Does he have a reputation among discriminating buyers for doing even the toughest jobs well and making on-time deliveries?

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MOLDING OF ALL PLASTIC MATERIALS.

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who take Hadacol "feel so good," they couldn't possibly turn Communist.

Up to now, Dudley J. LeBlanc, state senator in Louisiana and Hadacol's mastermind, hasn't had time to think of export. He was just too busy trying to supply his healthful brew to folks in the southern U. S. But in a few weeks, his LeBlanc Corp. will open a new plant at Claremont, Calif. That will ease the pressure on the Louisiana plants, and export plans will forge ahead.

• **Europe Must Wait**—For a starter, Hadacol will invade Latin American markets (Europe will have to wait). LeBlanc is surveying Cuba and Puerto Rico, hopes for factories in Havana, and in San Juan or Santurce, P. R. Already a Puerto Rican glass factory is dickered with LeBlanc to turn over its entire production to Hadacol bottles.

The fun-loving senator figures the possibilities south of the border are red-hot. Says he, "Latin Americans are natural medicine users. They're short of vitamins and minerals nutritionally and will be greatly benefited by my very meritorious product."

BUSINESS ABROAD BRIEFS

Canada's sulphur shortage will be eased by a new plant that will produce sulphur from iron pyrites concentrate. Noranda Mines, Ltd., will build the plant, hasn't yet decided where. Noranda has been experimenting with pilot tests that yield 50% sulphur and 50% iron oxide, figures that a 20% rise in sulphur prices makes the process practicable.

Krupp is back in business: Allied authorities have O.K.'d construction of a new Krupp foundry and iron works at Essen, Germany. The company also wants permission to build a new rolling mill for superhardened steel there. . . . It's reported that Krupp will design a steel mill for South Africa, perhaps get the contract to build it.

Britain's little Austin did well in the U. S. car market last year. Austin Motor Car Co., Ltd., says it sold 5,452 autos here during 1950, 50% over 1949 sales. But Austin warns that rearmament will put a crimp in deliveries this year (page 109).

French interests are busy in Peru. They have a \$10-million deal afoot to build a small steel mill at Chimbote, 350 mi. north of Lima.

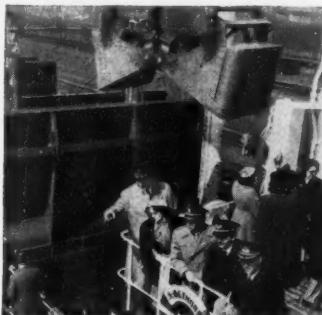
Sharp & Dohme, Inc., has leased a factory in Manila, Philippine Islands, plans to manufacture about 34 of its various drug products there.



ORE TRAIN leaves Bethlehem's Venezuelan mines for trip to river port . . .



BARGES carry ore down Orinoco River to ocean carriers dock at Puerto de Hierro . . .



ORE SHIP is greeted at Sparrows Point, Md., by Bethlehem officials, Venezuelans.

Venezuelan Iron Arrives

The U. S. steel industry got its first shipment of Venezuelan iron ore last week. The 22,000-ton ore carrier S. S. Benthore, seven days out of Puerto de Hierro ("Iron Port"), docked at Bethlehem Steel Co.'s Sparrows Point works.

In time, Bethlehem hopes for 3-million to 5-million tons of ore yearly from its El Pao mines, in the jungle 200 mi. from the sea. And within a few years, there'll be a lot more Venezuelan ore arriving as U. S. Steel Co. gets its rich properties at Cerro Bolivar producing (BW—Feb. 11'50, p.19).

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Industry Rises to the Production Challenge

American industry is responding in overwhelming fashion to the government's call for more production. That's the story told by business' capital spending plans in the latest survey conducted by the McGraw-Hill department of economics (page 67).

The key to more production tomorrow is stepped-up business investment today. That's why the survey gives a solid basis for confidence that we can do the production job ahead.

Industry plans to spend on plant and equipment in 1951 the all-time record sum of \$21.5-billion. That is 45% above what was actually invested in 1950. In the manufacturing industries alone, spending blueprints add up to \$13.3-billion, fully two-thirds more than last year's results. Some of this expected increase, of course, is only price inflation. But there is real expansion, too, in these dollar figures: If they translate their plans into plant and equipment, manufacturers in this country will have upped their capacity by a remarkable 9%. Even allowing for what material and labor shortages may do to some of these plans, there will be a striking gain in the economy's productive power.

Chief mobilizer Charles E. Wilson has called for production to sustain a threefold program:

(1) Provide munitions for the \$50-billion-a-year limited mobilization effort now planned (this is not enough to beat Russia in a war; it's designed to give us enough strength to deter her from starting a war, or check her for a year, if she marches).

(2) Lay the basis for full mobilization in the event of war.

(3) Expand capacity for civilian output enough so that our 1950 living standard can be regained by 1953, plus the arms production.

That program is entirely within our reach. And the thing that will make it possible is more capacity—especially to produce and process basic materials. The big spending on plant and equipment now under way and planned by American industry will widen and speed the flow of needed civilian and war output.

But this kind of supercharged investment boom brings along problems of its own.

First, more of the spending is for enlarged capacity, less for stepping up productivity through replacement and modernization of old facilities. Last year manufacturers spent 57¢ of every investment dollar for replacement and modernization. In the 1951 plans this share is only 42¢.

Second, the telescoped investment programs will give American industry so much capacity that by 1953 businessmen may again face the job of selling their goods. That should not be a frightening prospect, though it will mean getting acquainted with the fact that there are such things as buyers' markets.

Third, and most urgent of the consequences of our big capital spending, is the shot in the arm it gives inflation. The reason is elementary economics: To expand plant and equipment requires men and materials that might otherwise be producing for the finished goods markets. Workers and suppliers are paid, but there is no equivalent in goods for consumers to buy. The result is rising prices. When the new plants get into production, of course, the tables are turned—more goods are available to meet demand, and pressure on prices is eased. But that is later on.

Because the capital expansion program is so big and so fast, dealing with its inflationary effects would be at best a tough job. But the plain fact is that the weakest part of the whole mobilization effort is the fight on inflation. It got under way late. Until a month ago real progress in sitting on credit expansion was impossible because the Federal Reserve Board had to pump out cash to support government bonds above par. The President has asked for heavy new taxes, but he has been unable to get action out of his congressional leaders. Price and wage controls, now two months old, are rapidly becoming a museum of muddle.

There is no doubt our expanded capacity can give us the output we need. But Washington must buckle down to its job if inflation is not to jeopardize our success on the production line.

Dr. Bell's Invention

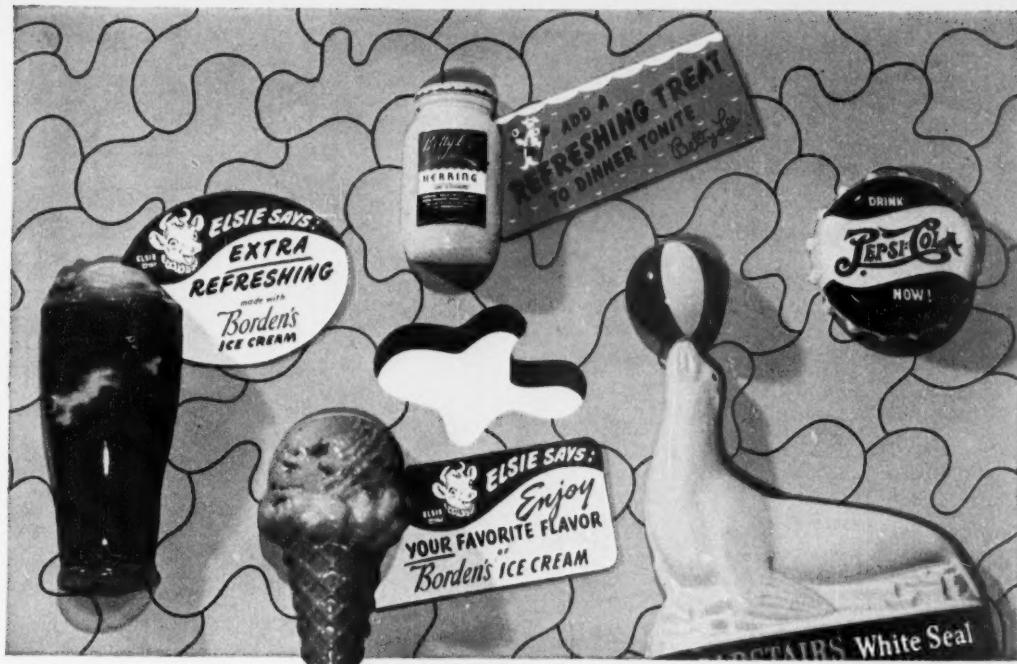
Men can do business by hand signals and smoke codes, and have. But they would find it hard to run a modern industrial empire that way. Of all their tools, the telephone is perhaps the least dispensable.

In its 75 years it has undergone great changes. First it linked two people, now it can bring together for conference men in 25 cities. It came to life with the famous call from the inventor to his assistant along 40 feet of wire. Dr. Bell's cry for help could now circle the world.

The process of growth from two telephones to the 43-million that now serve American businessmen, housewives, and teen-agers has split the very wire itself until a single eight-tube coaxial cable could carry up to 2,400 conversations at the same time.

The latest change frees the message from the wire and carries it through the air by microwave radio impulse. This year the Bell System will have equipped its series of towers to send across the country (by microwave radio relay system) either complete network television programs, or hundreds of telephone conversations, or a combination of both.

This is a notable candle on the birthday cake of Dr. Bell's invention.



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oil, grease, soap, food, and moisture resistance—and you'll see why they are ideal for three-dimensional dress dummies, doll faces, multi-colored lampshades, relief maps that resist perspiration, handling, and washing. They have even made possible large four-color photographic transparencies at low cost.

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